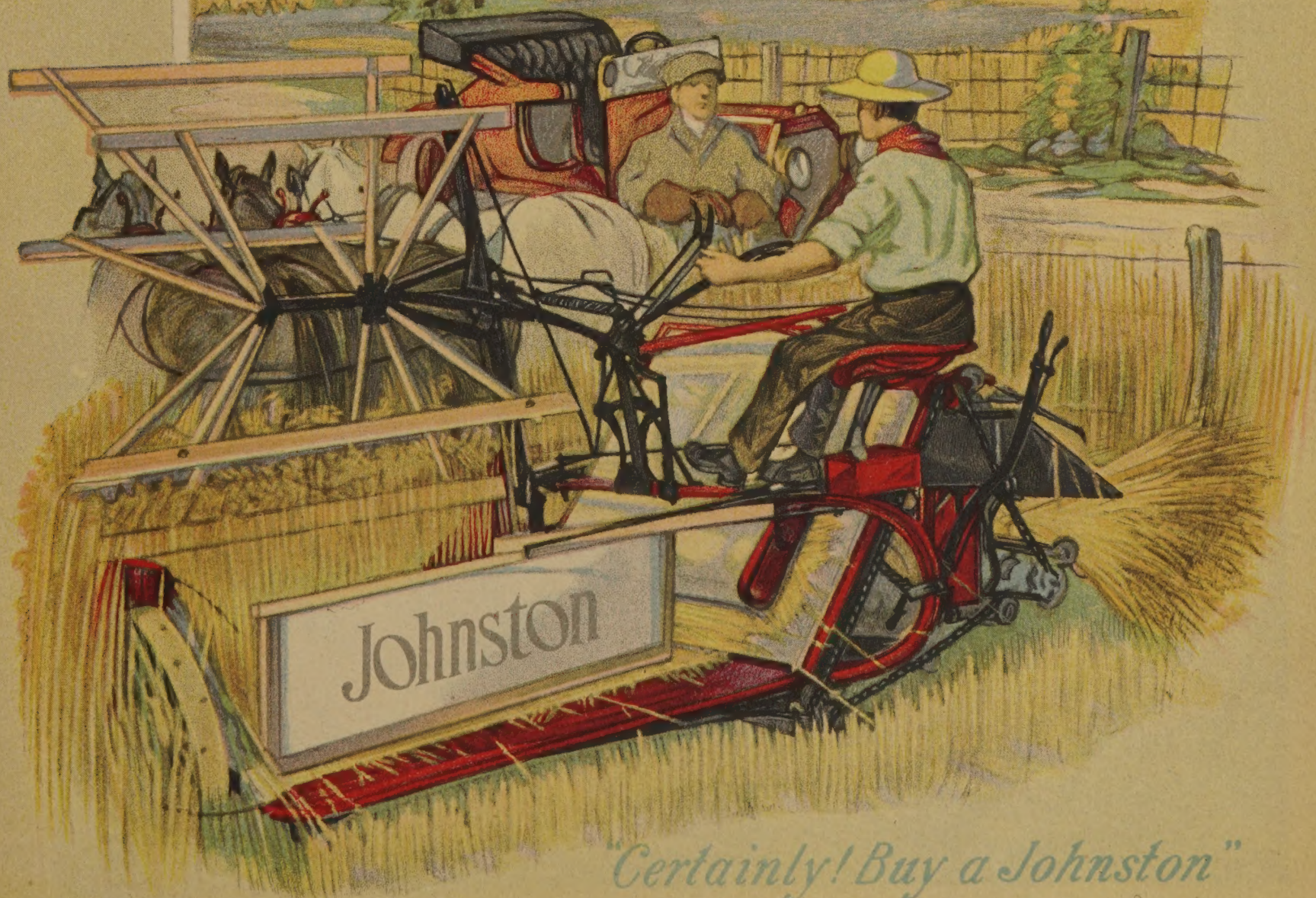


JOHNSTON

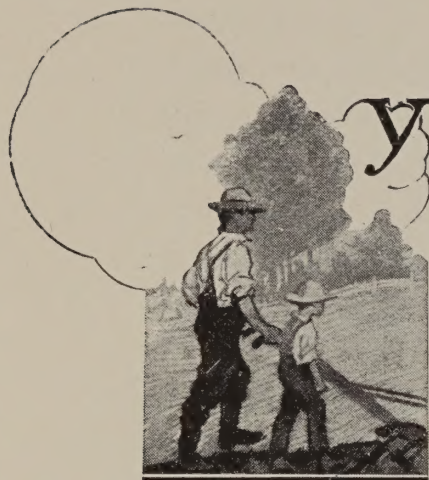


"Certainly! Buy a Johnstone"





When You Were a Boy— And Now



YOU can recall the days when dad would not let you hold the plow handles alone; and the days when he insisted on your smoothing that north field again when you could not see how it would do any good. In short, you can remember always wanting to do something he thought you were not big enough to do.

Now that you have grown to mature years you know why he was so insistent about what you should and should not do. You know now that it was just because you lacked experience.

He knew you were not old enough to plow. He knew that the seed he intended planting in that north field would grow better if you went over it just once more with the smoothing harrow. He knew all this and more from experience.

Back in those days your father may have had one or more Johnston Machines on the farm. They were being sold as early as 1871, but the output was small and the distribution was confined to a limited territory. Since then we have grown until Johnston Machines are used in nearly every country on the globe.

We have grown after the same manner as you have grown. After years of experience you can farm better than your father could in days when he would not let you hold the plow. After these years of experience we can manufacture better machines for you than we could for your father or grandfather.

The Johnston Machines and Implements, illustrated and described on the following pages, are the outgrowth of practical experience. We have been taught what are the best materials to use in the building of these implements; what construction gives the best results under different conditions of soil and climate; what parts must necessarily be made stronger and heavier than others. All to the end that every purchaser of a Johnston Machine is assured that he is not only getting the worth of his money, but that his machine is as near perfect as fifty years of experience, the best materials, and skilled workmanship can make it.

We commend to you these Johnston Machines.

The Johnston Harvester Company

Home Office and Factory, Batavia, N. Y.

European Offices:

148 Boulevard De La Villette, Paris

131 D Freidrichstrasse, Berlin





Johnston "Continental" Binder

HERE we present to you a front view of our six-foot, left-hand Binder, and views of a few of its parts. First of all, note the foundation on which we build our Binder. The main frame is steel, in one piece, and well braced. To it is attached all the necessary gearing and shafting and the whole is compact, simple and strong. Roller bearings are used and the gearings are always in perfect mesh.

Look on as many different makes of binders as you care to and you will not find a main or master wheel that matches ours. It is thirty-six inches high and ten inches wide. It is of the suspension pattern, which means that the weight is suspended from the rim and does not bear down on the hub. The suspension construction adds to the strength of the wheel and helps to lessen the weight of the machine. Notice the position of the angle steel calks. They are placed at right angles and diagonally to the edge of the rim. This gives the greatest traction on all kinds of soil and keeps the wheel running true.

The hub is fitted with dust-proof, steel roller bearings. A strong Locke Steel Belt chain is used for driving power. Our drive wheel is easily raised or lowered by gear, worm and shaft.

A binder platform must be strong and durable. The Johnston is of one piece and of steel. It is supported on the under side by steel angle ribs and in the rear by a steel torsion pipe which makes sagging impossible. Our method of supporting the platform is far superior to others. Experience has proven that bracing from one corner to another is not effective.

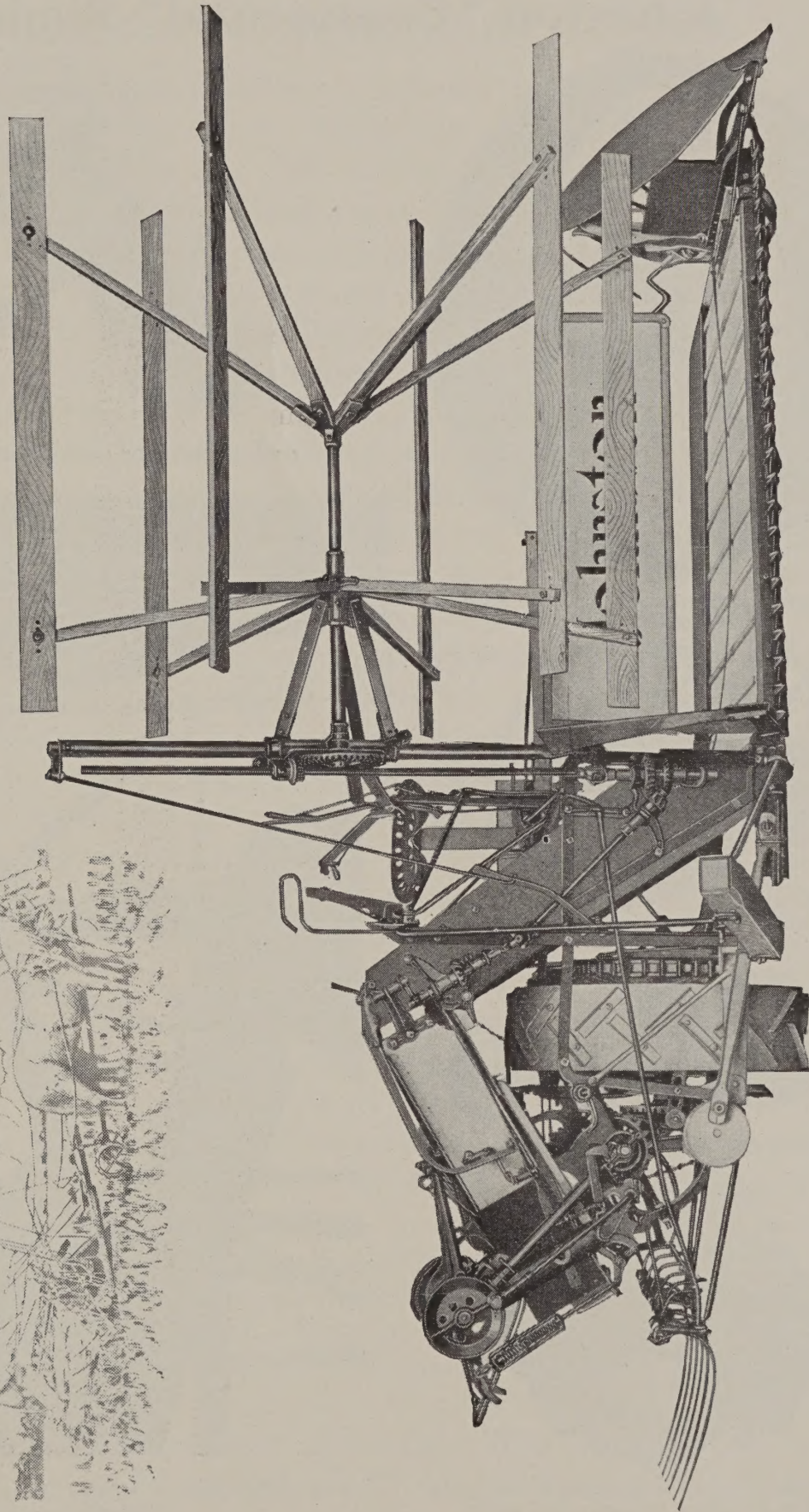
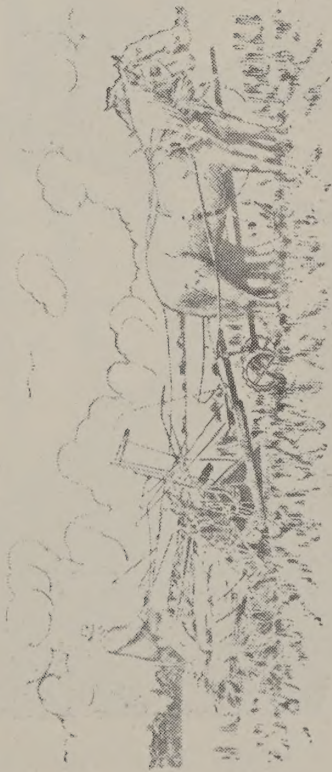
The Johnston elevators are just high enough to give sufficient clearance to the wheel. These frames are well braced and there is no possibility of the upper elevator sagging. Note the brace at the rear from the top of the upper elevator to the seat support. The elevator chain is well shielded.

No grain can fall between the elevators and deck on a Johnston Binder because we use what is known as the seventh roller. Another feature is the $5\frac{1}{4}$ -inch lower roller on the upper elevator. Any kind of grain will not choke our elevators.





Johnston "Continental" Binder

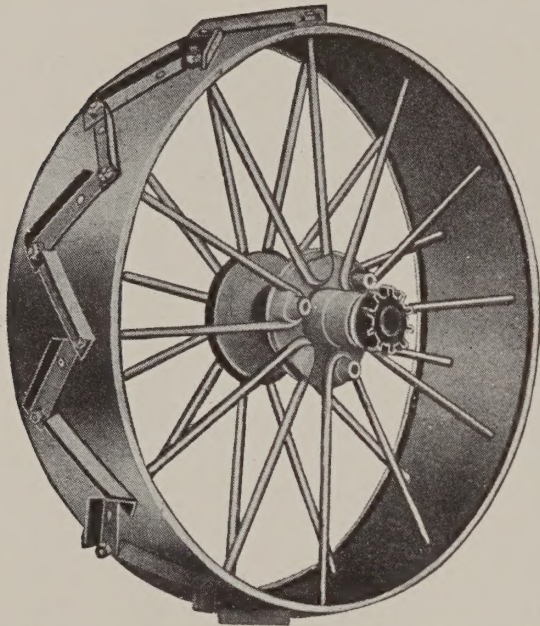


Here is a six-foot left-hand Binder that has given complete satisfaction. It is built to cut your grain in the most economical way—maximum efficiency in your field with the minimum of trouble and repair cost. Built in several sizes

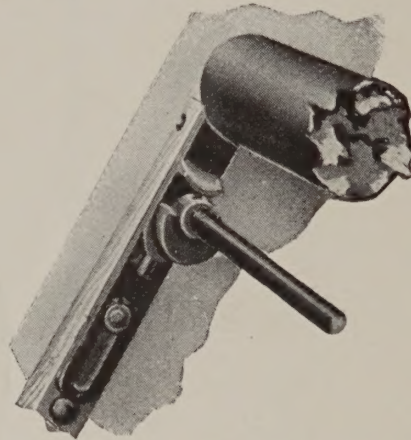




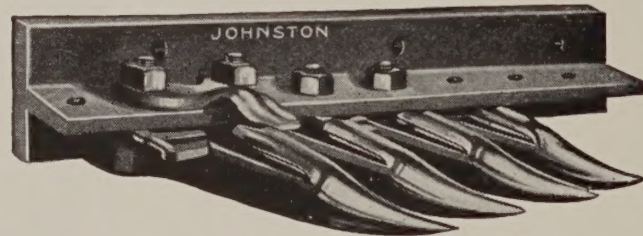
Johnston "Continental" Binder



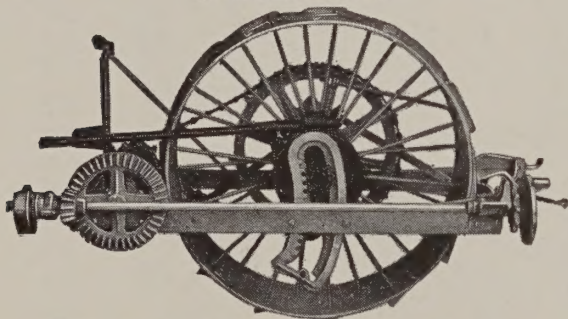
The master wheel. 36 inches high and 10 inches wide



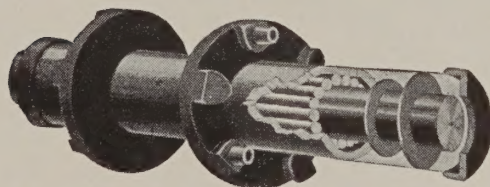
The elevator canvas tightener



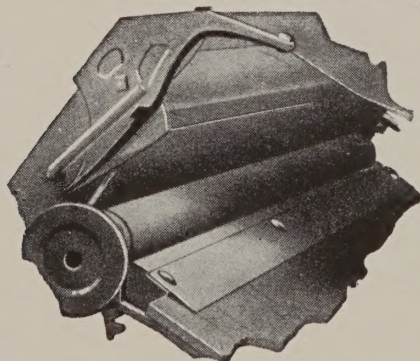
The T-shaped steel cutter bar



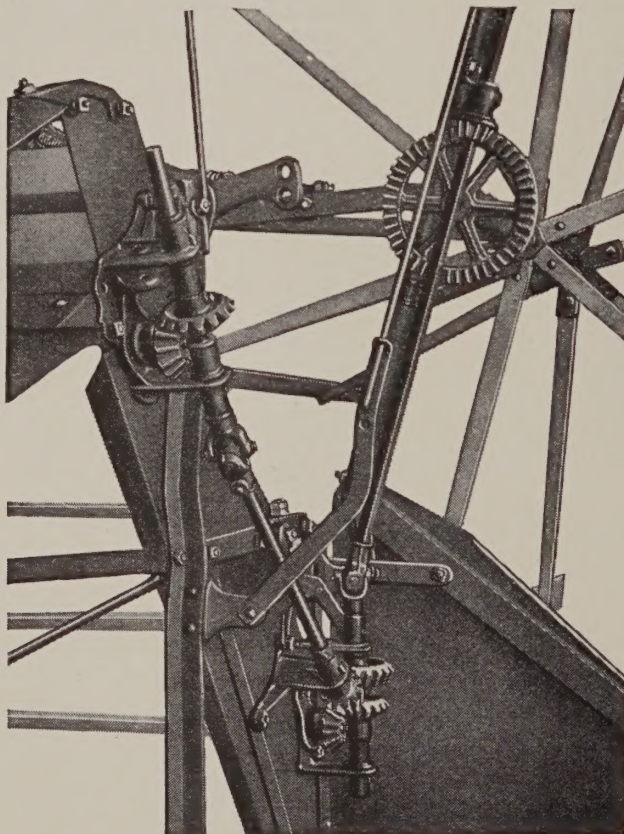
Side view of the main frame of left-hand Binder



The durable roller bearings



The seventh roller which prevents grain falling between elevator and deck



The lower portion of the 51-inch reel standard.
Also the gearing





Johnston "Continental" Binder

ALL canvases are heavy—heavier than you will find on other machines. Cleats are stronger and will not easily break. We do not use springs for canvas tighteners, as they are not effective. The Johnston canvas tighteners are operated by an eccentric lever on the outside and have proven the best and simplest method of regulating this necessary adjustment. They insure an even tightening on both sides—a thing that is seldom true when spring tighteners are used.

Notice the adjustable retarder which prevents the heads of medium or short grain elevating faster than the straw.

A T-shaped steel cutter bar is used on all 7- and 8-foot Binders. This gives greater strength and more rigidity to the bar. Our guards are fitted with steel plates. You can cut closer with a Johnston Binder than with any other because our guards are set flush with the bottom of the platform.

The Johnston reel has the widest range of adjustment found on any binder. The standard is fifty-one inches high, strongly supported. It is gear driven. It is easily and quickly adjusted to any required position. The six beaters are always kept parallel with the platform. Every lever is within convenient reach of the driver's right hand.

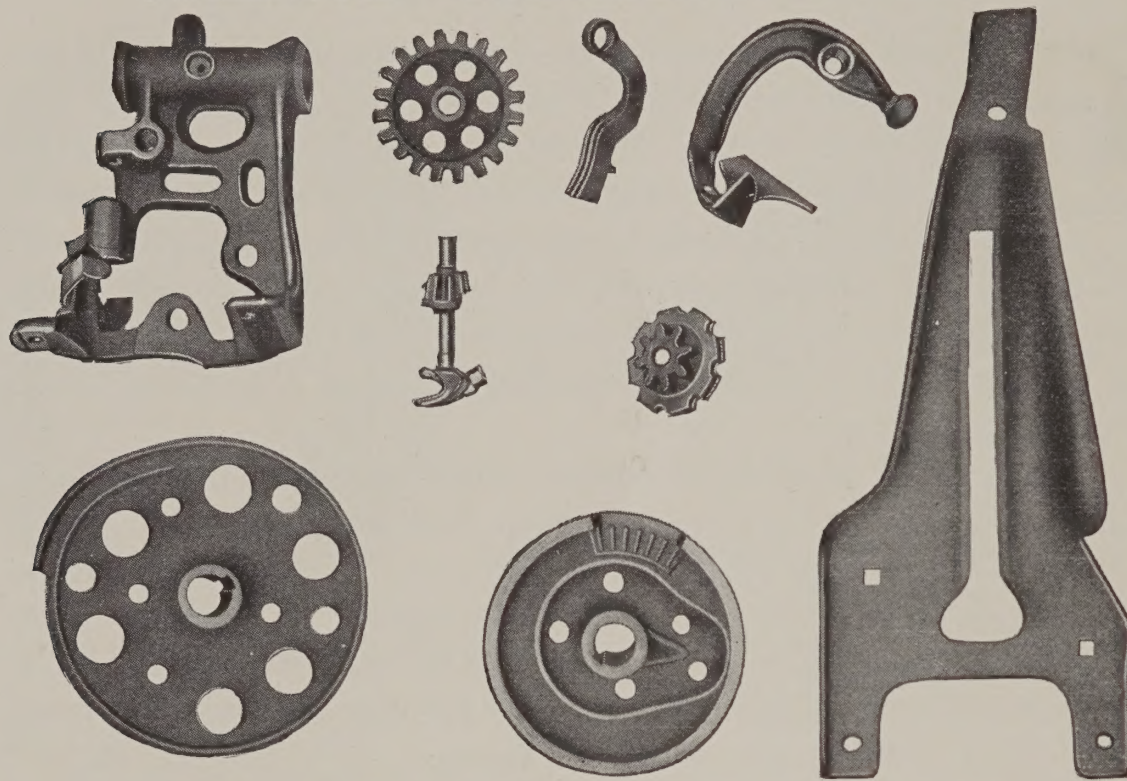
The binding attachment is gear driven. A one-piece frame makes a perfect bearing for the shafting and gearing. A thorough test of each knotter is made before the machine leaves the factory. We use a spring-trip binder lock that always works. It never repeats, when properly adjusted, or causes the making of small bundles. The trip and compressor springs are adjusted independently.

Johnston packers keep just ahead of the needle and do all the heavy work. Our packers run in detachable boxes, which is a most important feature. This you will find only on Johnston machines. The boxes are of two parts. These two parts are held together by two set screws. They are easily, quickly and cheaply replaced when worn or broken. The packers on other binders run in heavy castings which are not detachable and are expensive to replace.

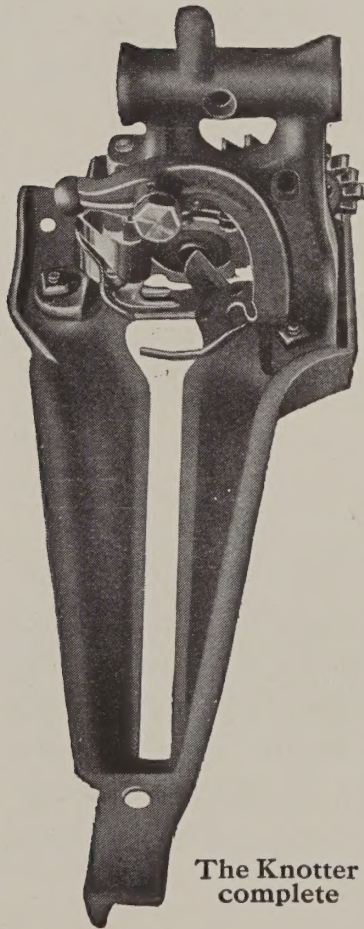




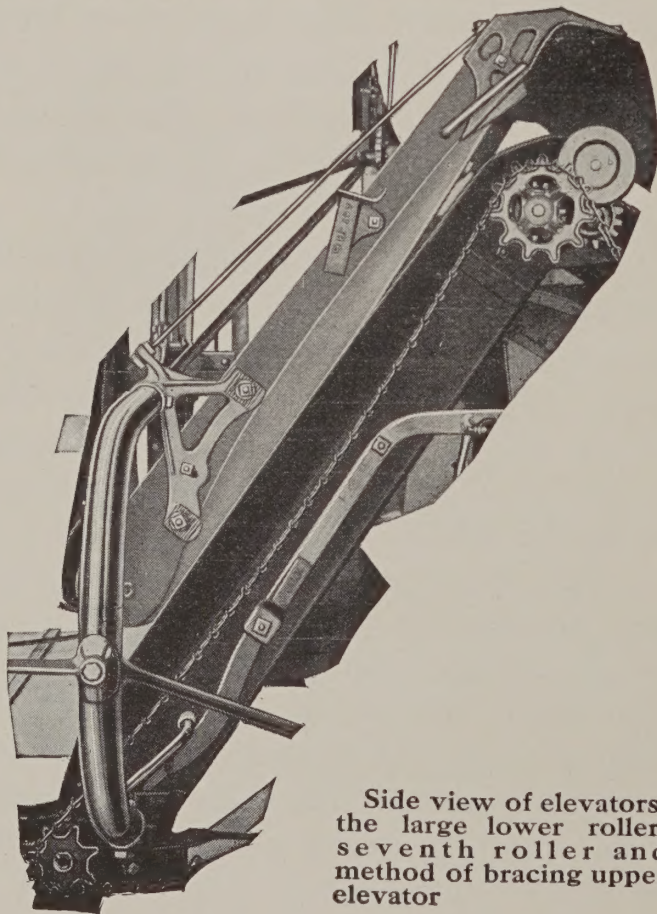
Johnston "Continental" Binder



The nine parts of the simple and effective Johnston Knotter



The Knotter
complete



Side view of elevators,
the large lower roller,
seventh roller and
method of bracing upper
elevator





Johnston "Continental" Binder

WE have had no occasion to change our tying mechanism in the last twenty-five years, which ought to be ample proof that we have a knotter as near perfect as one can be made. Look at the views of its separate parts. Note the simplicity of construction, which is the secret of its perfect operation. A perfect knot is tied, not a loop. Bundles are tied regularly and of a uniform size. Yes, we sometimes receive reports of our Binders not tying properly but investigation has always shown that it was simply a matter of adjustment to make it work perfectly.

Each Binder is equipped with a third discharge arm which is easily adjusted. Steel decks are used on all our Binders and they are steep enough to allow abundance of room for the forming of the bundle. The tier is easily moved to accommodate tall or short grain and tie it in the proper place. You can bind long grain twenty-four inches from the butts, or short grain eight inches from the butts. Our butter works with a link movement and positively keeps the butts even while the bundle is being tied.

The bundle carrier is of steel and folds back out of the way. It has six fingers and is held in position to receive the bundles. It is tripped by the driver's foot. Both the inside and outside grain dividers swing in out of the way. They have no hinge joints to break and cause trouble. Our transport truck is of the steel stub axle kind, simple in construction and easy to attach. A Johnston Binder can be mounted for transport in five minutes. We equip our Binders with a three-horse equalizer which really equalizes. A four-horse equipment is furnished with an eight-foot Binder.

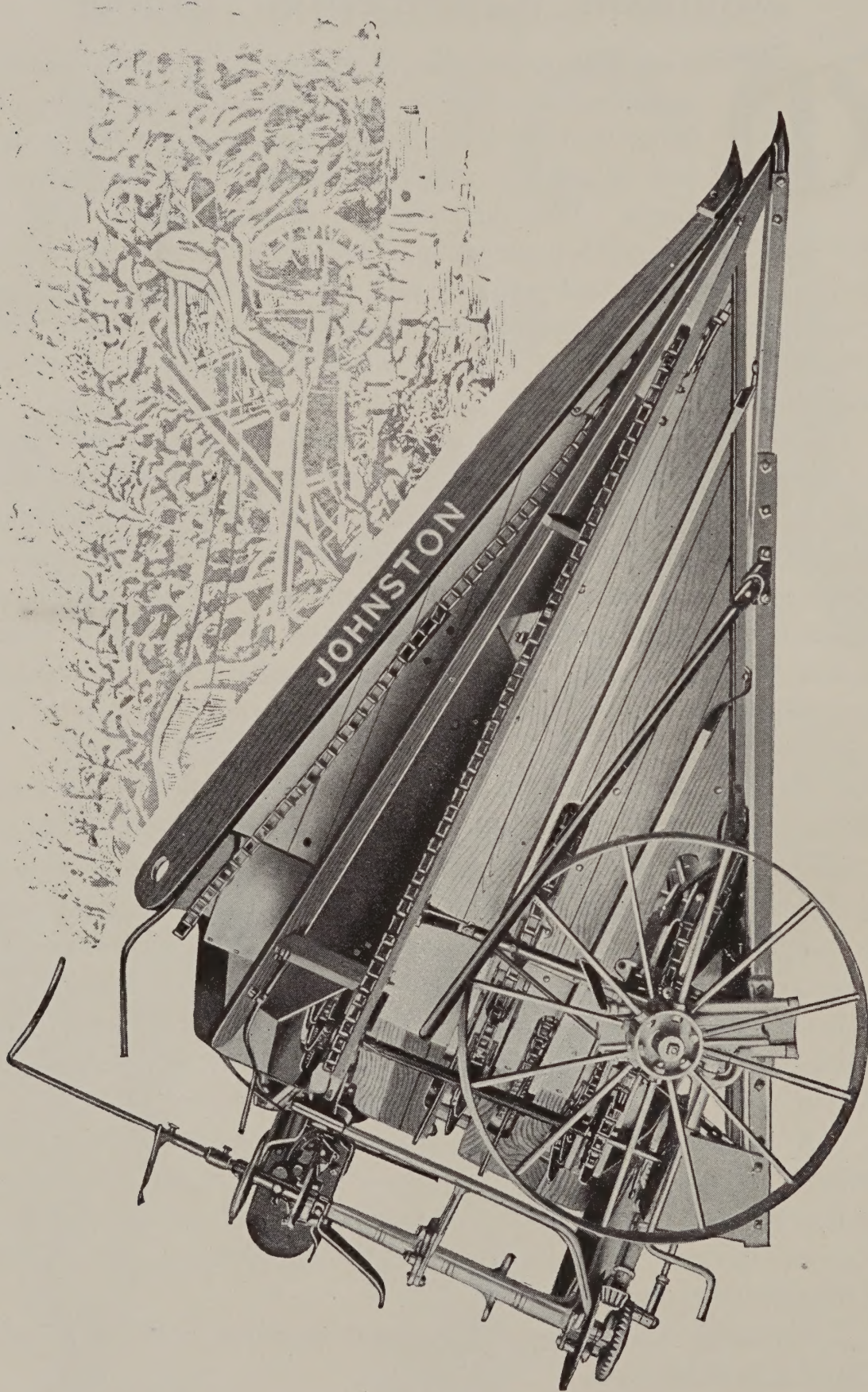
A Johnston Binder is not heavy, as some would make you believe. It is light of draft and easy on your horses. In every particular it is built to give you many years of service at a low cost for repairs. We use a great deal of malleable iron which gives strength and reduces weight.

We make both left- and right-hand machines in 5-foot, 6-foot, 7-foot and 8-foot cuts.





Johnston Corn Binder



This Corn Binder has been put to very severe tests. It has been put into fields where several other binders have failed and has given entire satisfaction





Johnston Corn Binder

THE Johnston Corn Binder is without a peer. That is a strong statement to make, but that it contains features which make it the best is recognized even by our competitors. Ask any user of our Corn Binder and he will bear out this statement.

It will cut and bind all kinds of corn under the most adverse conditions. It will save all your corn because it knocks off 80 per cent. less ears than other binders. It will not tip over on a side hill. It will not clog in short, grassy fodder corn. It will cut the highest corn that grows. These are but a few of its superior points. Read the more detailed description.

The one-piece main frame is of steel and is exceptionally wide. The pole is attached inside the main wheel. This you will find only on the Johnston. The weight is evenly divided between the wheel and operator on one side and the elevator and gearings on the other. The binder attachment is therefore in direct line of draft. The machine is always perfectly balanced and has absolutely no side draft. Hence our assertion that it will not tip over on side hills.

The drive wheel is forty inches high and nine inches wide. It is of the suspension pattern, the same as the master wheel on our Grain Binder. The steel calks are also placed at right angles to aid traction. The hub is fitted with dust-proof roller bearings.

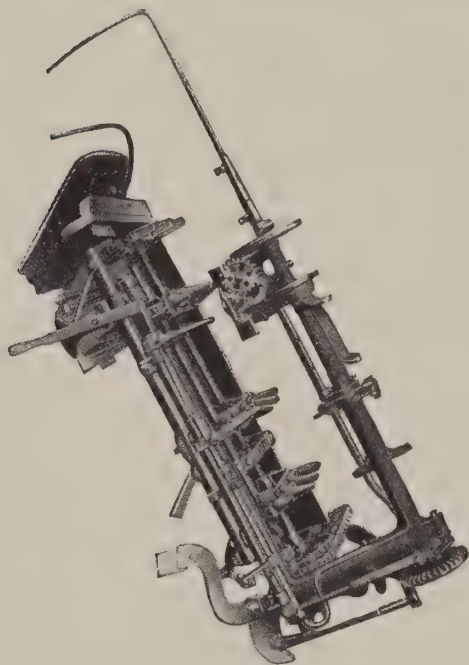
Our cutting apparatus cuts and does not tear off the stalks or pull them up by the roots. Its construction is simple and practical. There are two stationary knives, one on either side, and a sliding knife which works the same as a sickle. This sliding knife is really an auxiliary knife, as the greater part of the cutting is done before the stalks reach the sickle. This is an important point because it reduces the strain on the pitman and gearings which operate the sliding knife or sickle. This helps to lighten the draft.

The gathering chains work very effectively. They pick up the row knocked down when opening the field. They will also gather up corn which is tangled or has been blown down by storm.





Johnston Corn Binder



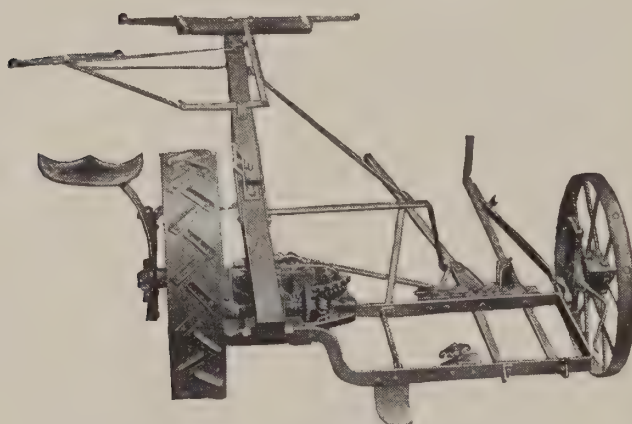
Binder attachment, showing high adjustment for tall corn



The sickle and knife cutting apparatus.
Also the steel pitman



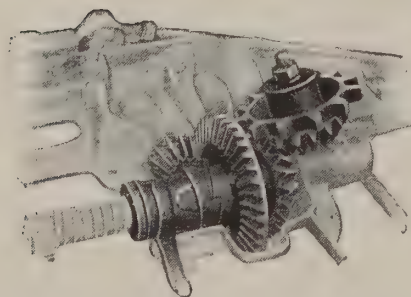
Self-aligning idler sprocket
box



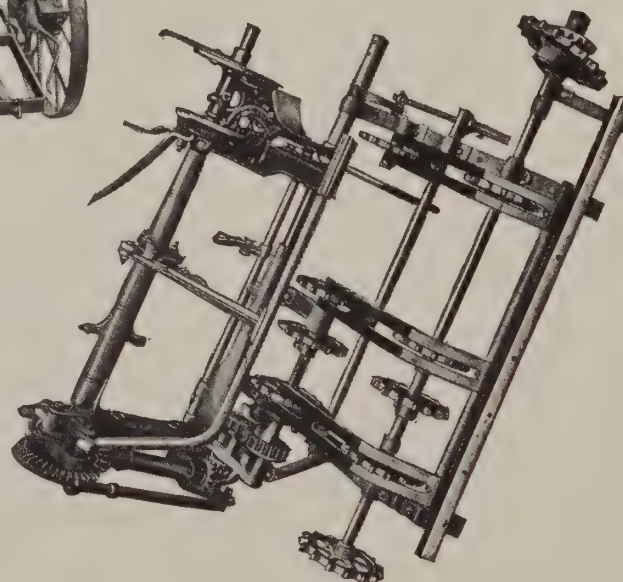
Showing frame, large main wheel,
and location of pole and seat



The conveyor
fingers

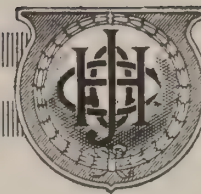


Perfect mesh of main driving
gears



The automatic gates which do away with all
packers. Adjusted for tall corn





Johnston Corn Binder

THE stalks are cut in practically a vertical position, but just at that moment when they are bent backward and held taut. You have often cut corn by hand and know how much easier it is to run your corn knife or sickle through the stalks when you have them bent backward and held taut underneath your arm. It is in exactly the same position when being cut by a Johnston Corn Binder.

Now, one of the features which makes our Binder better than all others is the automatic gates. No other corn binder is equipped with the Johnston automatic gates. The corn is carried to the binding attachment by conveyor chains with folding fingers. Just before the needle passes around the bundle, the automatic gates release these fingers, which pass on as the machine moves and resume their natural position. The use of these automatic gates and folding fingers makes it unnecessary to use packers of any description. It is the packers on other corn binders which knock off the greater percentage of ears. The absence of packers on the Johnston assures the knocking off of 80 per cent. less ears. It is not necessary to follow the Johnston Corn Binder with a team, wagon and two men to pick up knocked-off ears of good corn.

Our binding attachment is easily and quickly adjusted to bind tall or short corn just where it should be bound. It can bind above or below the ears as desired, and from eighteen inches to thirty-two inches from the butts. The binder frame extension is easily removed, so that needle and knotter is lowered when very short corn is being bound. The stalk channel has a six-inch adjustment.

All levers are within easy reach of the driver. Our steel bundle carrier will carry five large bundles. It trips from the seat and discharges the bundles at right angles to the row. This is an important feature, as the outside horse easily steps over the bundle instead of tramping the whole length of it as is the case when the bundle is thrown straight with the row.

The Johnston is five feet, eleven inches wide, and will easily pass through any ordinary gateway.





Johnston "Continental" Reaper

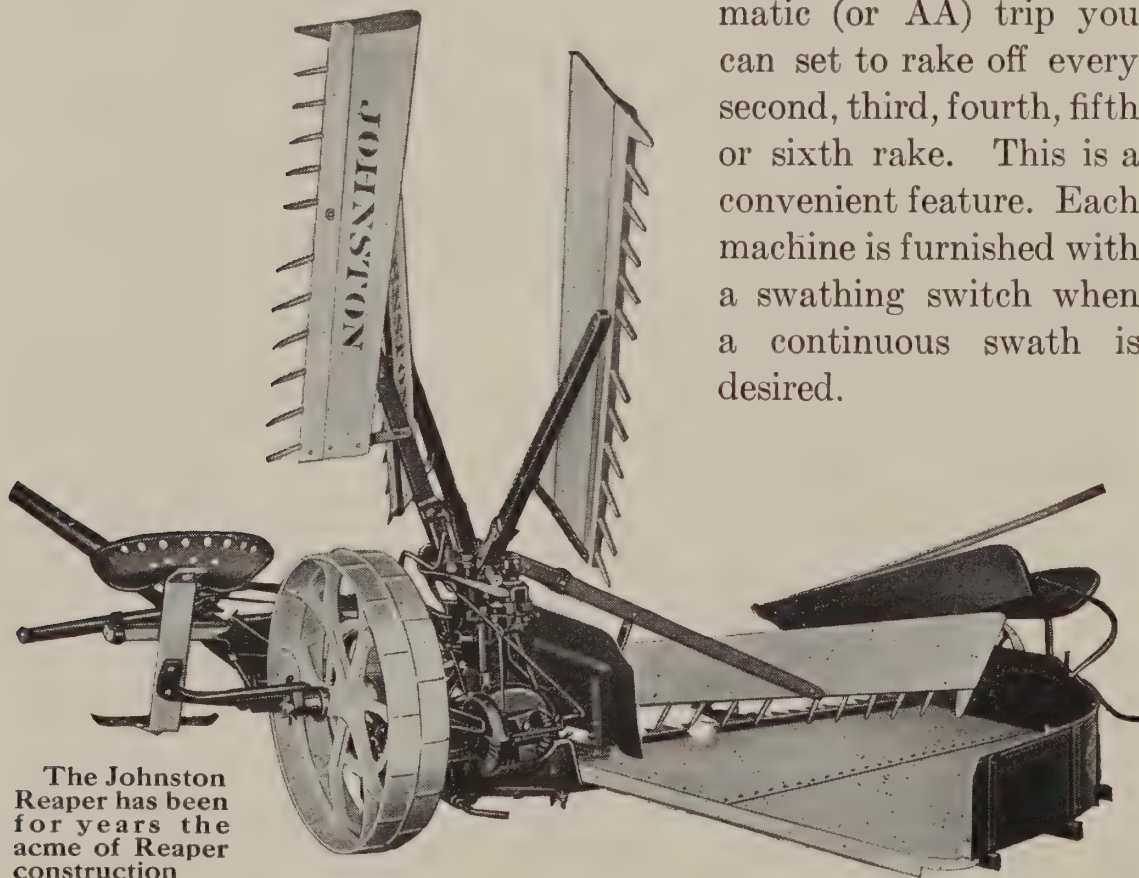
HERE are the good points about the Johnston Reaper, which has been on the market over thirty-five years. Compare them with any other reaper sold.

Our main frame is strong and rigid, and makes a perfect support for bearings, gearing and platform. Our boxes are separate from the frame, but securely fastened to it. Gears are well shielded. The main wheel is strong, high and wide. Deep lugs aid traction. Roller bearings are dust-proof.

The Johnston platform is of steel and can be raised or lowered at either end by gear, worm and shaft. Steel trusses prevent sagging and a steel pipe supports it. One man can easily fold or unfold our platform without aid.

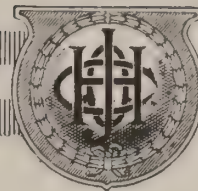
Our rake standard is high and perfectly shielded. The rakes are parallel with the finger bar its entire length. The gavel is discharged squarely and well away from the machine even on side hills. Rake blades are solid, which prevent the straw winding about them.

The cam is adjustable for long or short grain. With our automatic (or AA) trip you can set to rake off every second, third, fourth, fifth or sixth rake. This is a convenient feature. Each machine is furnished with a swathing switch when a continuous swath is desired.



The Johnston Reaper has been for years the acme of Reaper construction





Johnston Mowers

ONE satisfied customer recently wrote us as follows:
“The six-foot Johnston Mower I got of you last season has given entire satisfaction. I consider it a better and stronger machine than others. If not, I would have gotten another, as I had all kinds of opportunities.”

This man was satisfied because we gave him just the kind of Mower that was adapted to his needs. We manufacture three distinct Mowers for our American trade. Each one has its ardent admirers because it is built to fit into the requirements of distinct soil and crop conditions. One of these three Johnston Mowers is what you need on your farm.

Johnston Mowers are designated by number—Nos. 11, 12 and 14. While in fundamental principles they are very similar, each one is adapted to use under different conditions. You will find them described and illustrated on the following pages.

All our Mowers are made with the lever-fold or vertical lift feature. They will be furnished in plain-fold only when so ordered. This lever-fold feature has become very popular within the last few years. It enables the operator to clear field obstructions, such as stumps and stones, by means of a convenient foot lever. This will raise the outer end of the bar $18\frac{1}{2}$ inches and the inner shoe 10 inches from the ground. To then raise the bar to a vertical position it is only necessary to use the hand lever, which raises the bar quickly and easily. A sustaining rod securely locks the bar in its vertical position. This feature enables the operator to pass close by trees, or other tall field obstructions, without leaving his seat. It is also very convenient while transporting to and from the field.

Every Johnston Mower is carefully tested before leaving the factory. The frame is set up with pitman, push-bar and cutter bar attached and run at a speed greatly in excess of what it would be run in actual field operation. If the wrist pin is going to heat it will heat during this test. Also, if gearings do not mesh properly the fact is at once detected and the trouble corrected.





Johnston No. 11 Mower

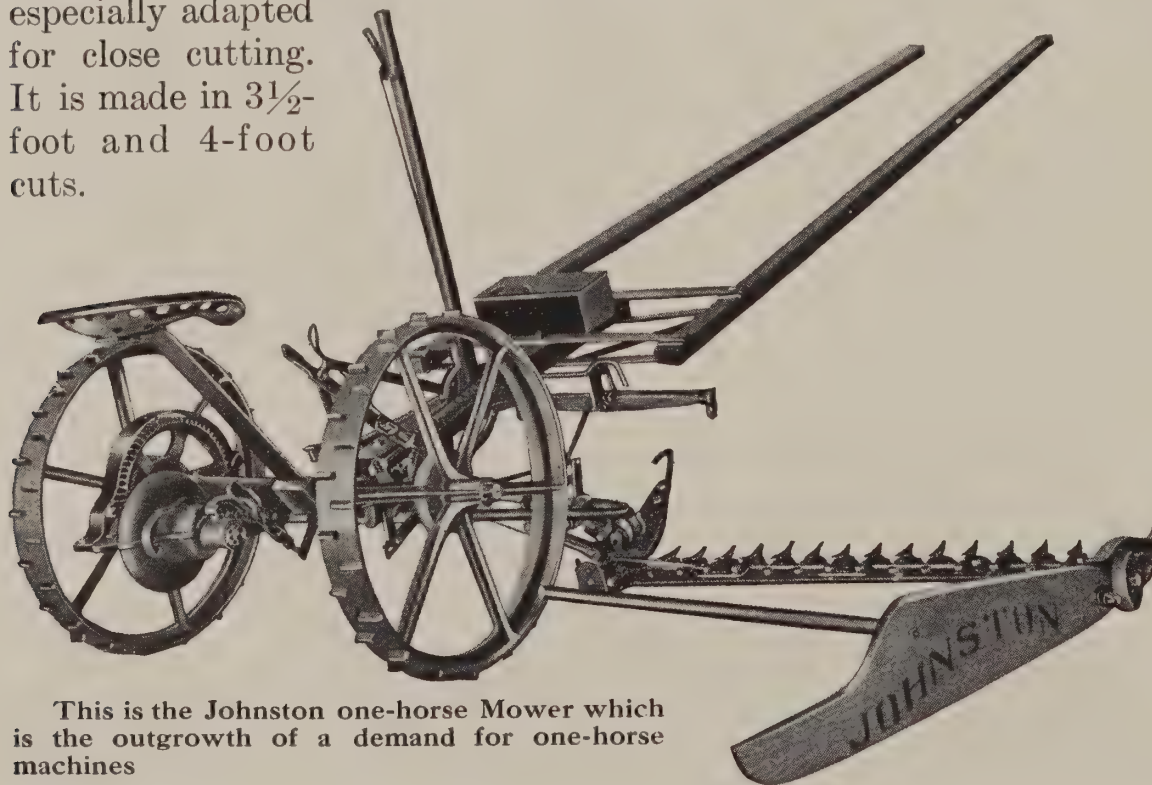
ALLS for a one-horse mower for such a variety of uses have perfected the Johnston No. 11 so that it is adapted for general use on small farms as well as for parks, lawns, golf courses, etc. It will cut short grass as easily as tall grass.

In general it is constructed along the same lines as the other Johnston Mowers. It is light and compact. Built to give years of service. The gearing is placed at the rear of the main axle. Has horizontal crank shaft with separate boxes (brass in front), long wood pitman with direct and easy motion.

The main axle and bevel gear shaft are each fitted with roller bearings. There are three pawls in each wheel. All levers are convenient. The lower bevel-gear shield is detachable, as is the crank wheel shield.

Wheels are high and are furnished with or without lugs. The use of a gag gear on all Johnston Mowers makes the cutter bar always hug the ground, yet it is flexible enough to follow any unevenness and thus always cut at an even height.

The singletree or whiffletree draws from under side of stub tongue. You will find this machine of very light draft. It is especially adapted for close cutting. It is made in 3½-foot and 4-foot cuts.

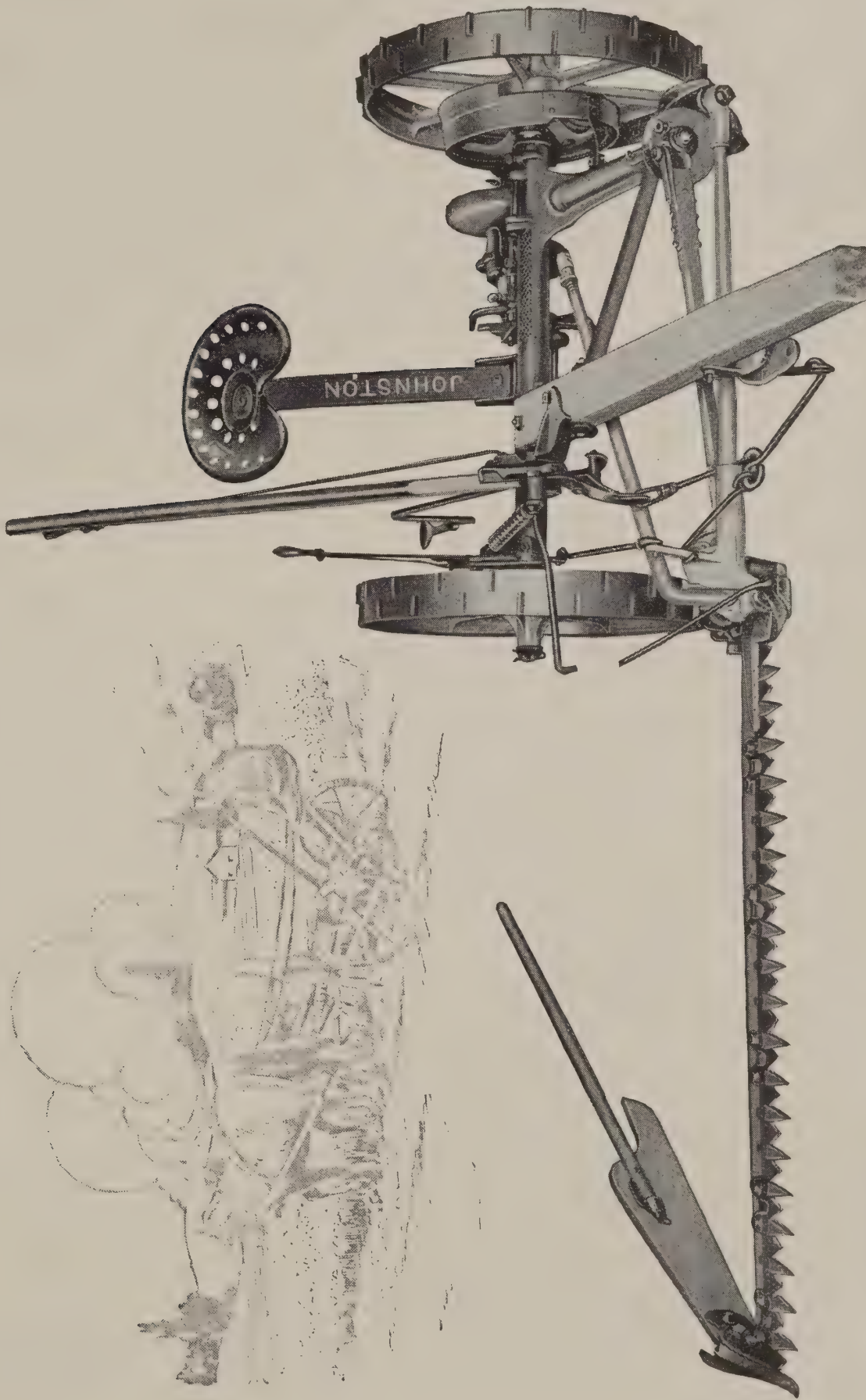


This is the Johnston one-horse Mower which is the outgrowth of a demand for one-horse machines





Johnston No. 12 Mower



A Mower that is built light, yet has the very necessary quality of strength and durability, is the one that will give you the best service. The No. 12 has stood severe tests and has proven its efficiency





Johnston No. 12 Mower

YOU may prefer a light weight mower, and if you do we want you to examine our No. 12. Here is a Mower that is built light—the lightest of any of the Johnston Mowers—yet its construction is such that strength and durability have not been sacrificed. The No. 12 has given the utmost satisfaction, which should be ample proof that a mower can be built light and at the same time durable.

First of all, the main frame differs from that used on the other Mowers. It is what is known as the bridged-type frame. It is in one piece and braced in such a manner as to give it great strength. There is absolutely no jar or vibration.

Steel, dust-proof roller bearings are used in the axle and bevel gear shaft. These insure easy running.

Our regular, extra-length, second-growth hickory pitman is used and our usual precaution has been taken to make its motion direct and easy. Pitman connections are malleable, together with wrist pin and box. The wrist pin is case hardened and polished and comes to you free from all paint and varnish, as we protect it with a cardboard tube. A hard oil chamber, in the center of the wrist pin, reduces to the minimum the possibilities of its heating and causing trouble. We take this precaution even after testing every Mower before it leaves the factory.

The large gear and a small pinion are set back of the main axle and are well shielded. They always mesh perfectly, and the machine is in perfect balance.

The crank shaft, of special steel, runs in a horizontal position under the main axle and retains oil on the bearings. Separate boxes at each end hold the shaft in line.

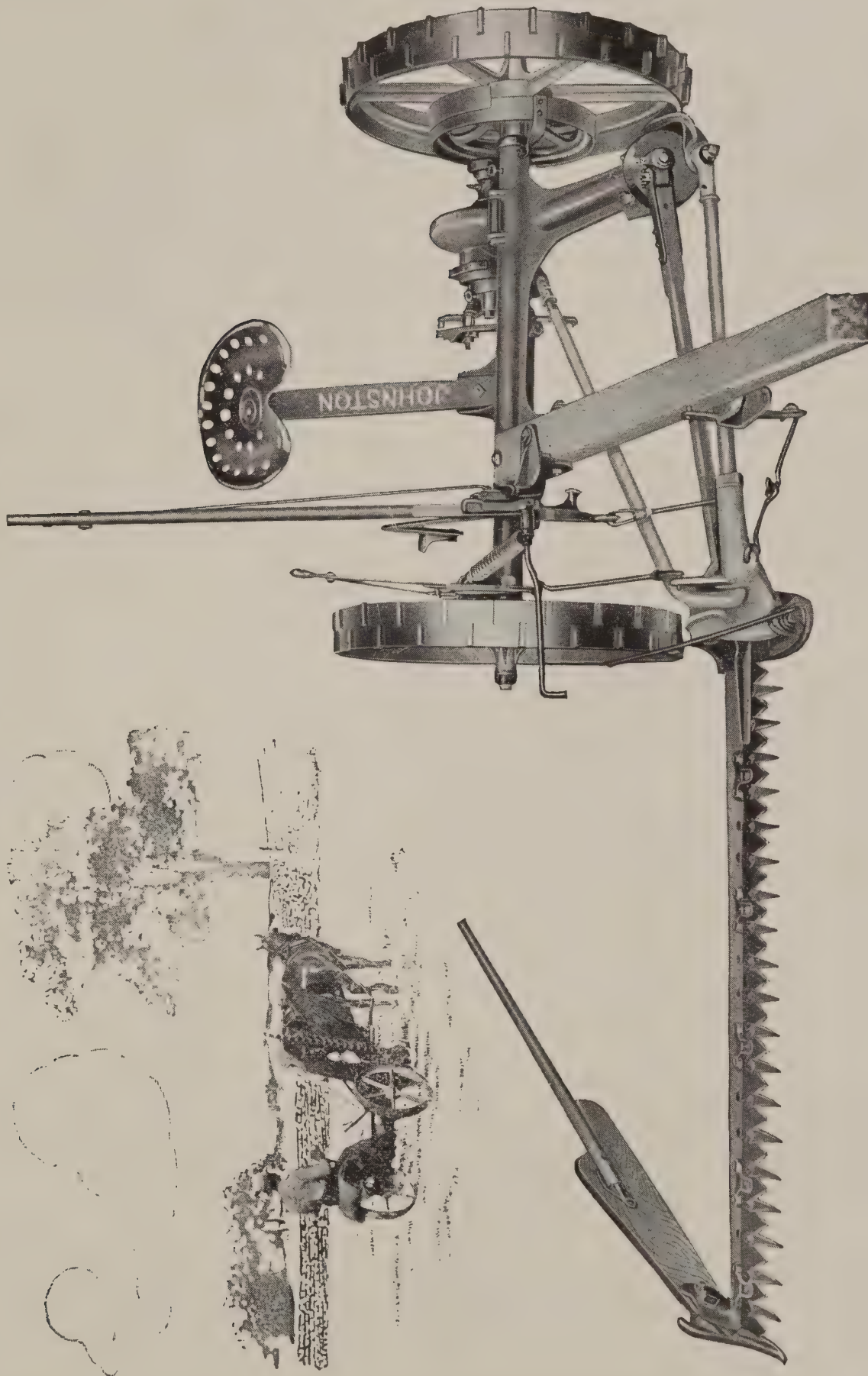
The cutter bar is steel and smooth on the under side. The guards are fitted with serrated steel plates. The steel push bar is in one piece and is adjustable. Each wheel has three pawls, which insures an even and accurate motion as soon as the wheels start. Pole is in direct line, insuring even draft.

The Johnston No. 12 can be had in two sizes—4½-foot or 5-foot cuts.





Johnston No. 14 Mower



The No. 14 Mower is built to carry a five-, six- or seven-foot cutter bar. Frame is wide and wheels are 34 inches high. It is a big mower for big farms and has demonstrated its value to farmers raising large crops





Johnston No. 14 Mower

ANY farmers who raise medium and large crops of hay realize that it is a distinct advantage to use a mower with a very wide cutter bar. If you can cut twelve acres of hay by having your team travel only sixteen and one-half miles with a 6-foot mower, you can see that it is quite an advantage over cutting the same twelve acres with a 5-foot bar and compel your team to travel nearly twenty miles. Much time is therefore saved.

The great problem has been to manufacture a mower that will carry a 6- or 7-foot bar with as great ease on your horses as one with only a 5-foot bar. This has been accomplished with the Johnston No. 14 Mower.

The truck on this machine is wider than on any other Johnston Mower. The wheels are thirty-four inches high. We believe this to be the highest-wheel and widest-frame mower made. Draft is very light and the machine is in perfect balance.

The No. 14 has the lever-fold feature and our positive gag connections enable the operator to raise even the 7-foot bar with ease. The long wood pitman with its free and easy motion runs on the case hardened wrist pin.

Our steel cutter bar is strong and rigid. Cuts close to the ground even when the surface is uneven. The steel push-bar is in one piece and adjustable to permit perfect alignment.

Whiffletrees draw from the under side of the pole where the two-piece draft rod is attached. This brings the pull in a direct line from the push-bar and insures easy draft. The whiffletree hooks are driven into the ends and will not pull out. Steel chafing plates make evener and whiffletrees work easily and prevent wear.

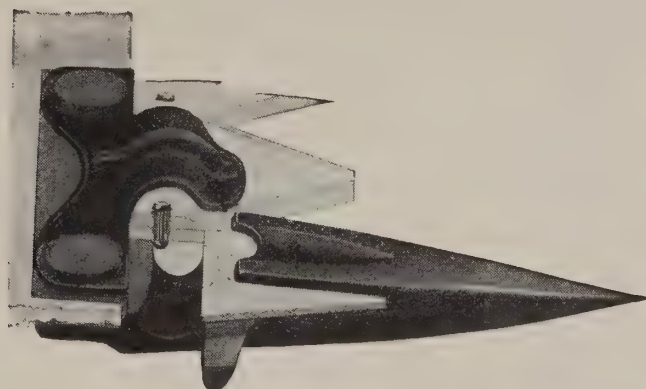
Roller bearings are used on main axle and bevel gear shaft. Machine is thrown in or out of gear by a convenient foot trip. It is automatically thrown out of gear when cutter bar is raised to an angle of thirty degrees.

No cost is spared in the manufacture of this Mower and we recommend it to you if your work demands a big-framed, high-wheeled, easy-running mower that will carry a five-, six- or seven-foot bar.

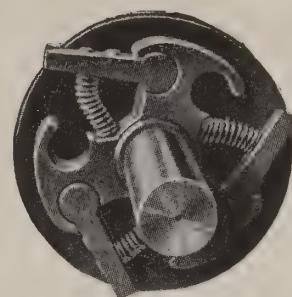




Johnston No. 14 Mower



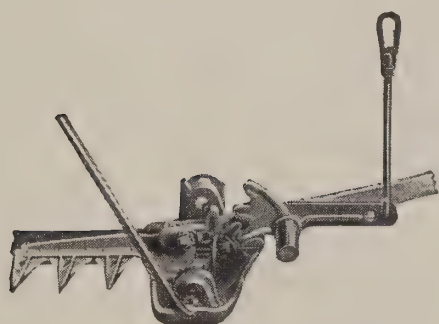
Guard, wear plate and serrated plate



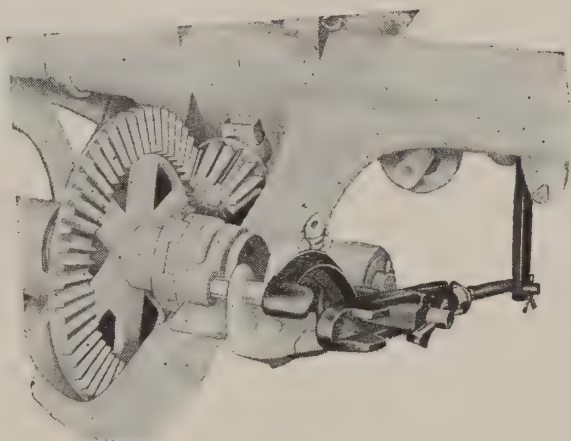
The three pawls which insure a positive motion



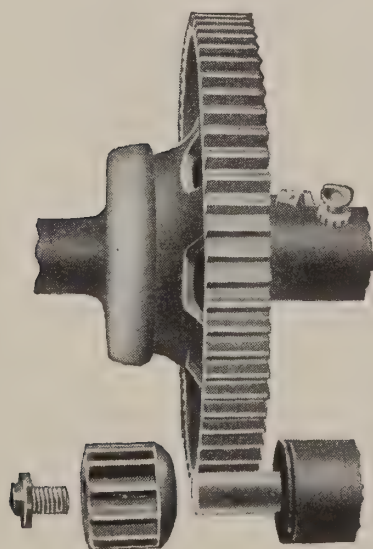
View of strong wood pitman and connections



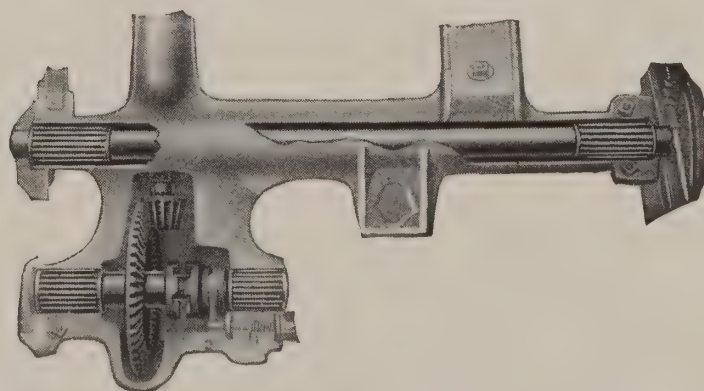
The gag lever connections



The perfect mesh of gearing and automatic throw-out



The gearing

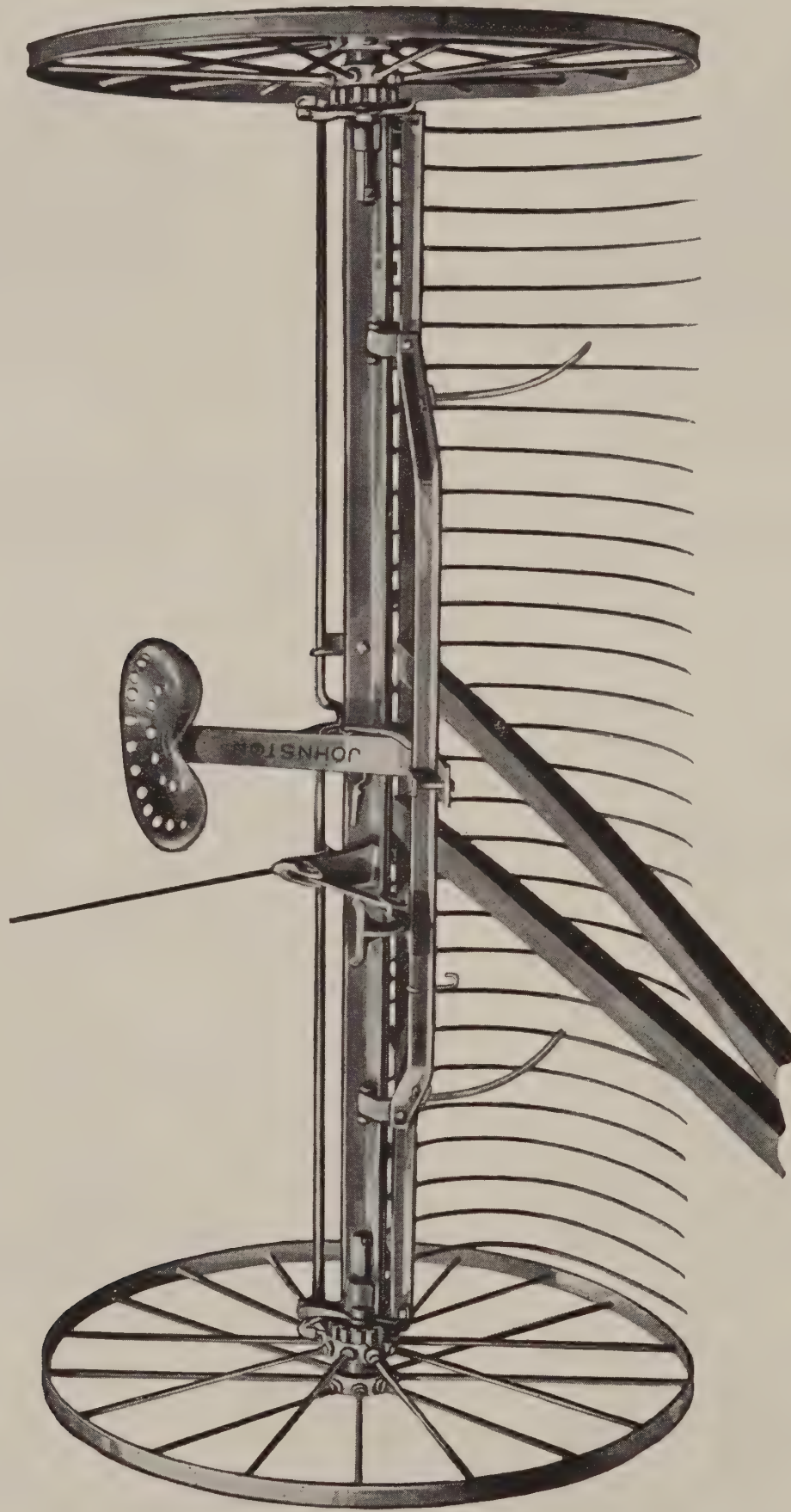


Frame, axle, gearing and roller bearings





Johnston Steel Hay Rake



A one- or two-horse Rake that will give you many years of service. Rakes clean, dumps clean and is easy running





Johnston Steel Hay Rake

IT would hardly seem necessary to give space in a catalog to such an ordinary implement as a Hay Rake. Every farmer has one. Rake construction looks so simple that it almost seems as if one rake must be as good as any other. Careful comparison of our Rake with others will prove to you that the Johnston Steel Rake is simple in its construction and will be durable in its service.

The main frame and rake-head are steel angles. These are securely hinged with steel hinges, which work with extraordinary freedom. All Rakes above 9-foot are steel-trussed. You need have no fear of a Johnston Rake sagging under any necessary weight. The machine is so constructed as to balance perfectly. This makes it of easy draft and no neck weight.

Our wheels are of steel and high. They have double hubs, staggered spokes, channel-steel tires with concave side out to give better traction. They are interchangeable, a feature not found on all rakes. The wheels run on short axles, which are securely held to the rake-head.

The steel teeth are long, flat-pointed, oil-tempered and interchangeable. They have free action, hang low, do not dig the ground and lift high when dumping. All Rakes are fitted with guard teeth.

The dump-rod is in one piece and works easily. It is effectively supported by two supports securely attached to rake-head. Its engagement in the ratchets on both wheels is positive.

The cleaner bars are securely fastened to the main frame and spaced by an adjustable spacing bar, which always keeps them in place. The Rake can be used either to dump by hand or foot.

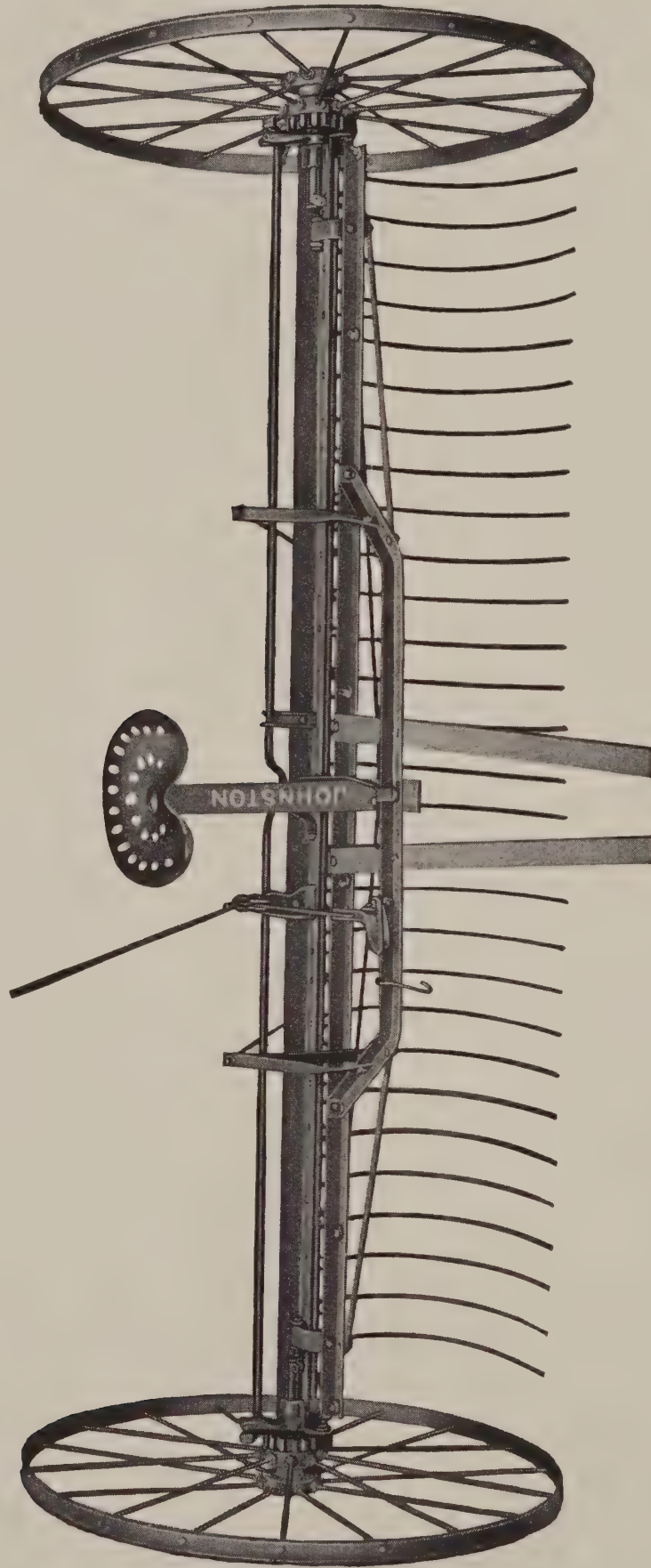
All levers are on the right hand side and are easy to operate. A small lock latch attached to the front of the frame is used in connection with the hand lever to hold the teeth up when going to and from the field.

Our Rake is fitted with a combination pole, so that it can be used with either one or two horses as desired. It is an easy matter to change it from one to the other. This Rake is made in several sizes and one of them will meet with your requirements.



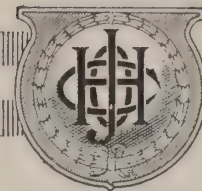


Johnston Alfalfa and Stalk Rake



A long Rake built to handle heavy crops or stalks. Light of draft and can be arranged for one or two horses





Alfalfa and Stalk Rake

THE Johnston 11-foot Alfalfa and Stalk Rake is built to meet the requirements of certain farmers who raise large crops of alfalfa or have use for a rake of extra strength and durability. This rake has been put to severe tests and has done excellent work in the heaviest of crops.

The main frame is made of two pieces of angle steel, securely bolted together. The frame is attached to the steel angle rake-head by three steel hinges which work with perfect freedom and there is little chance of breakage. A hinge is at either end and the third one is in the center. This third hinge is in the direct line of draft and materially helps to make a strong frame and one which will not sag.

A steel truss-rod runs underneath the rake-head from axle to axle and gives added strength. This truss-rod is so placed that it carries practically all the weight of the machine instead of the axles carrying it. The two-piece angle steel frame is braced by two steel braces running from the foremost point to the rear angle bar, where steel hinges are attached.

A steel seat support adds greatly to the strength of the frame. It is securely bolted to the front and rear angles and thus serves as a strong support for the seat spring and a strong center brace for the two-piece frame. To it is attached the singletree or eveners, so that the rake is drawn from this strong connection in the center of the machine. It is therefore always in perfect balance and of even draft.

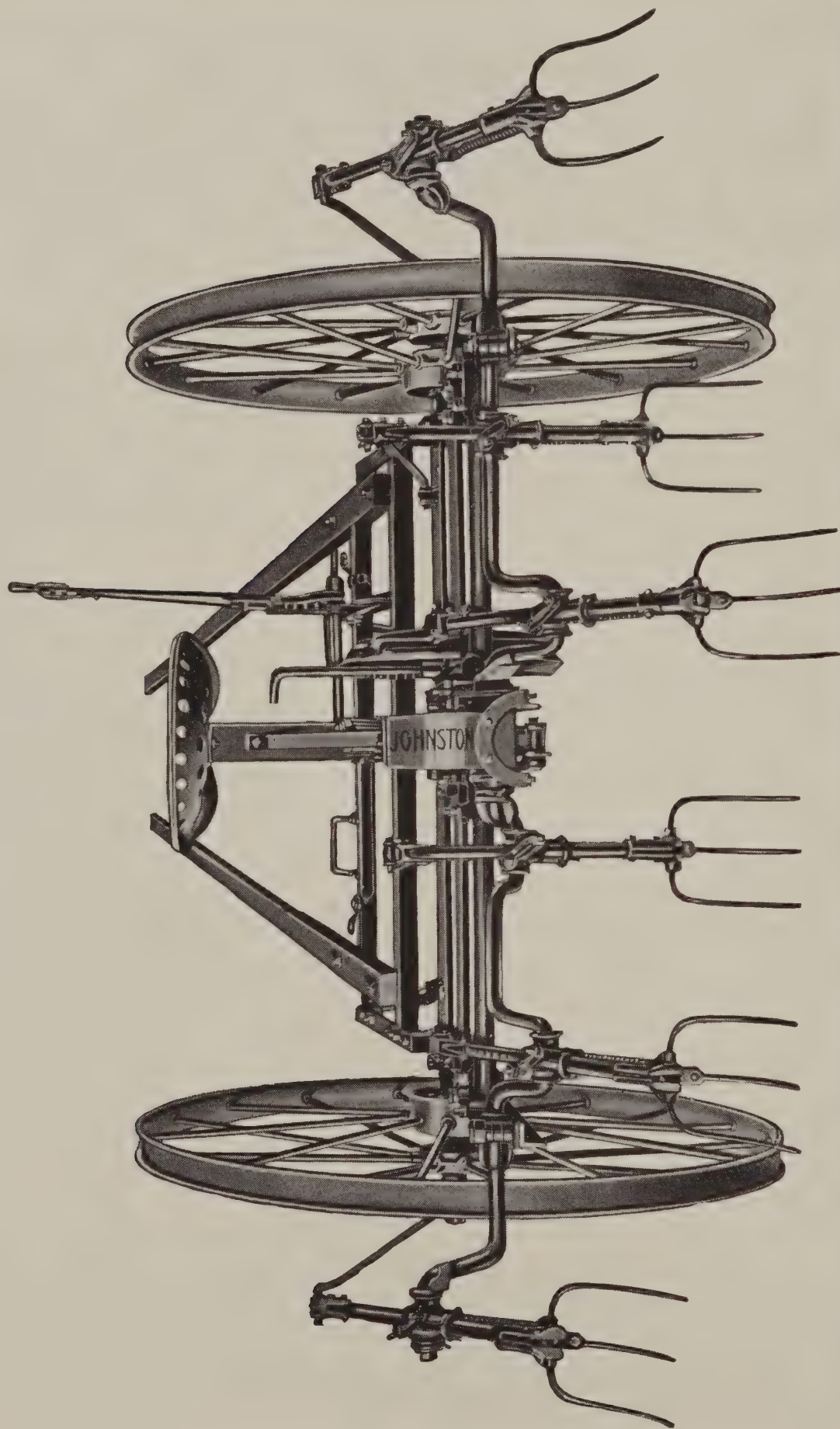
The wheels are high, made of steel with double hubs, staggered spokes and channel-steel tires. Spokes are securely riveted in both hub and tire. These wheels will stand up under all conditions. Short axles are used, the same as on our other hay rake. The wheels are interchangeable.

The steel teeth are long, round-pointed, oil-tempered and interchangeable. They hang low and work freely, but will not dig the ground. The cleaner rod, which is securely attached to the rake-head and spaced by an adjustable spacing rod, is securely braced by two braces which are attached to the main frame. This feature makes a very strong cleaner rod.





Johnston Hay Tedder



There is no Tedder constructed just like the Johnston, nor one that will ted your hay as well. One or two horses. Strong and durable





Johnston Hay Tedder

W HATE ANY a cutting of hay has been saved because of a Hay Tedder. Many a crop of hay has been made more valuable, as to its feeding qualities, because of a Hay Tedder. The Johnston has done its part toward this betterment of hay because it is built strong, durable and to meet every requirement.

The main frame consists of two sections which are securely hinged and pivoted at the axle. The front section is steel angle, the rear section steel angle and steel pipe, which, together with brackets, makes a very rigid and strong support for the forks and gearing.

The wheels on the Johnston are strong and will last the life of the Tedder. They are of steel and have double hubs, staggered spokes and wide channel steel tires, concave side out. Three sets of roller bearings in the main axle help to reduce the draft.

The forks are driven from the center by steel Locke Belt Chain. Power applied from both wheels at once gives even draft. The chain is protected by steel shield.

Three-tine forks are used on both the six- and eight-fork tedders. These are spring-tempered and set in one-piece steel. A spring trip enables the forks to meet obstructions without breaking. No two forks strike the ground at the same time, and yet none of the hay is left untended because of the rapid motion of the forks. Outside forks stir the hay that the wheels have passed over.

The fork crank boxes are made in two parts, securely fastened to the frame. The tilting lever controls the height at which the forks work. A spring in front carries the weight.

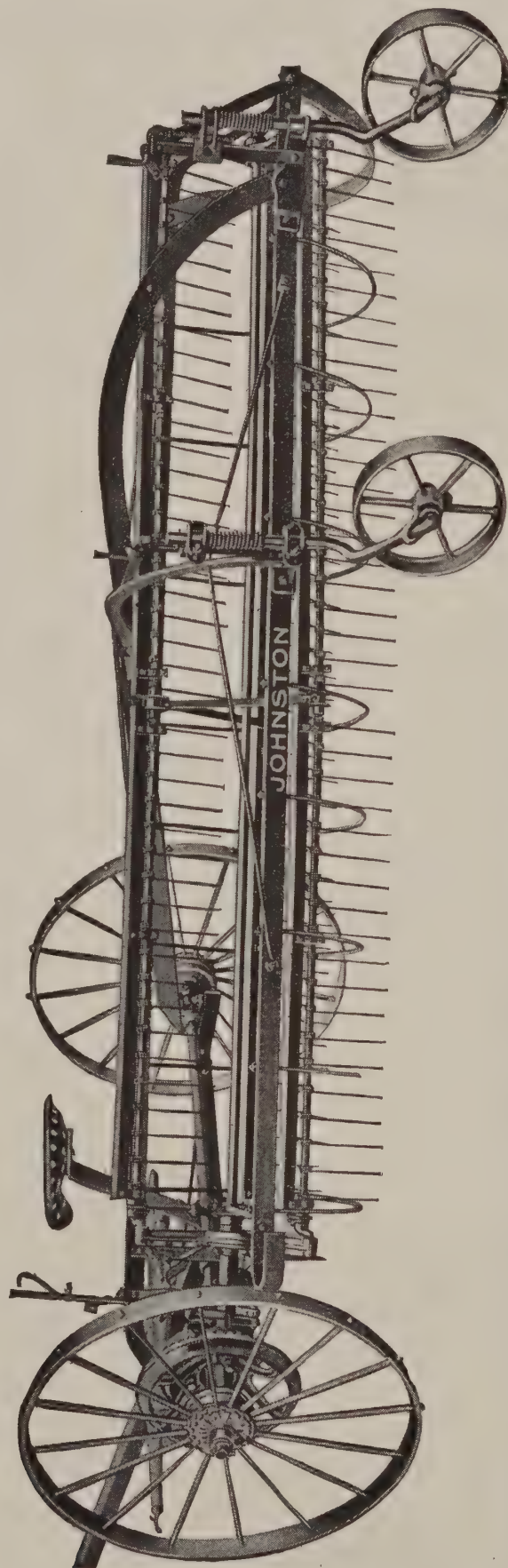
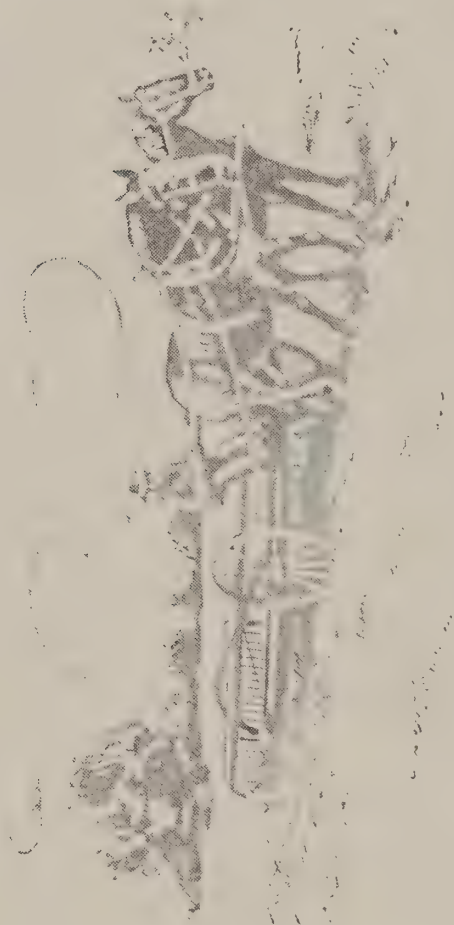
The Johnston Tedder can be used with either one or two horses, as each machine is furnished with combination pole and thills. No trouble to make the change from one to the other.

The best way to decide your Tedder question is to carefully look over the Johnston and compare it with other makes. We have no fear in leaving the question with you, as the machine is really better than we can describe it. Tedders are not used as much as they should be, undoubtedly for the reason that farmers do not realize what great value is added to the hay when it is cured properly.





Johnston Side Rake and Tedder



Rear view of the Combined Side Delivery Rake and Tedder which is fast coming into favor. Two machines in one. Light draft. Rakes clean, without twisting the hay. Can be changed to Tedder without leaving the seat





Johnston Side Rake and Tedder

THERE is a machine which will handle your hay, alfalfa or bean crop to your satisfaction. Its adaptability to your use need not be dwelt upon, but we call your attention to the following detail in construction and features which make it the most satisfactory Side Delivery Rake ever offered you.

A strong, well-trussed angle steel frame carries the raking cylinder in easy running bearings and keeps the working parts in proper relation.

The main wheels are high, and have wide tires and substantial malleable hubs. The driving power is from both wheels, which have traction speeds. This prevents slipping in heavy crops.

A lever within convenient reach of the driver's left hand controls the gearing. Throw this lever forward and the raking cylinder is put in gear at the lower speed for raking. The motion of the teeth when raking is easy but positive, their action being very similar to the work of hand rakes, handling the hay gently, without beating or threshing.

Reverse the position of the lever—throw it to the last notch backward—and the raking cylinder is put in gear at a higher speed for tedding. The motion of the teeth when tedding is the same as with the regular Tedder. The hay is thoroughly stirred and left in the best possible shape for rapid curing.

The teeth are of steel and made flexible by means of a coil in each tooth. This enables them to spring back either singly or together and thus prevent breakage. The teeth draw straight out of the hay and leave it without any tendency to carry it back over the rake drum, either when tedding or raking. Another convenient lever adjusts the angle of the teeth.

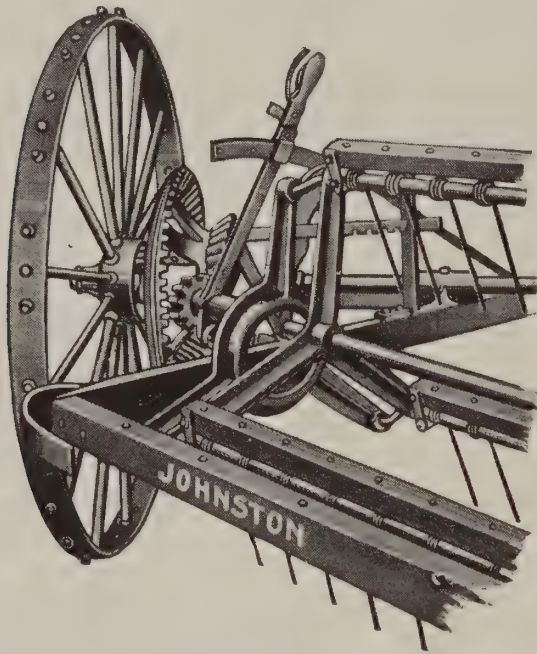
The rear of the frame is carried on two castor wheels, which can be adjusted to carry the frame at any desired height. A spring coil on each castor takes up the jar on rough ground. The center castor wheel is attached so that it can be easily and quickly removed when it is desired to use the machine as a Tedder.

The Johnston Combined Side Delivery Rake and Tedder is made in two sizes, 9½ and 10½ feet.

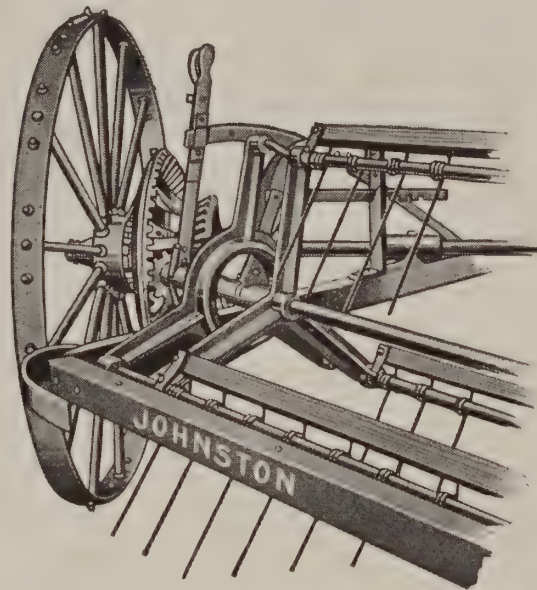




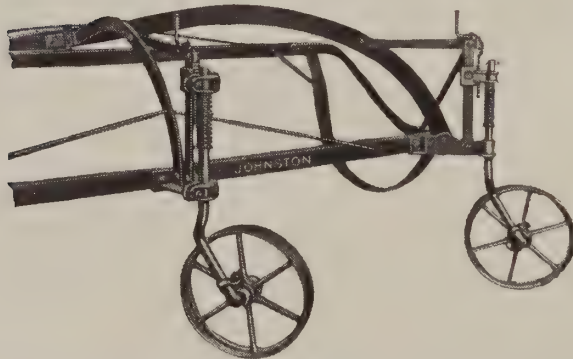
Johnston Side Rake and Tedder



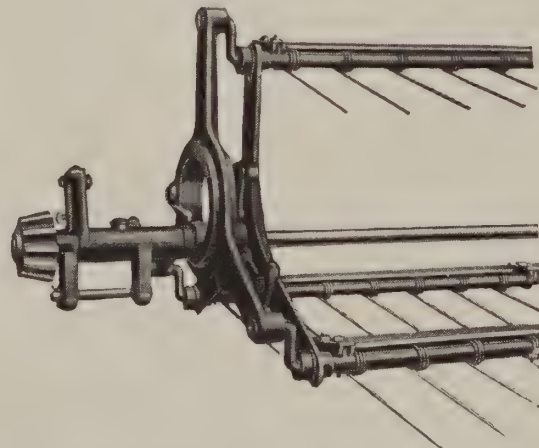
The convenient hand lever thrown forward, putting the cylinder in gear for raking



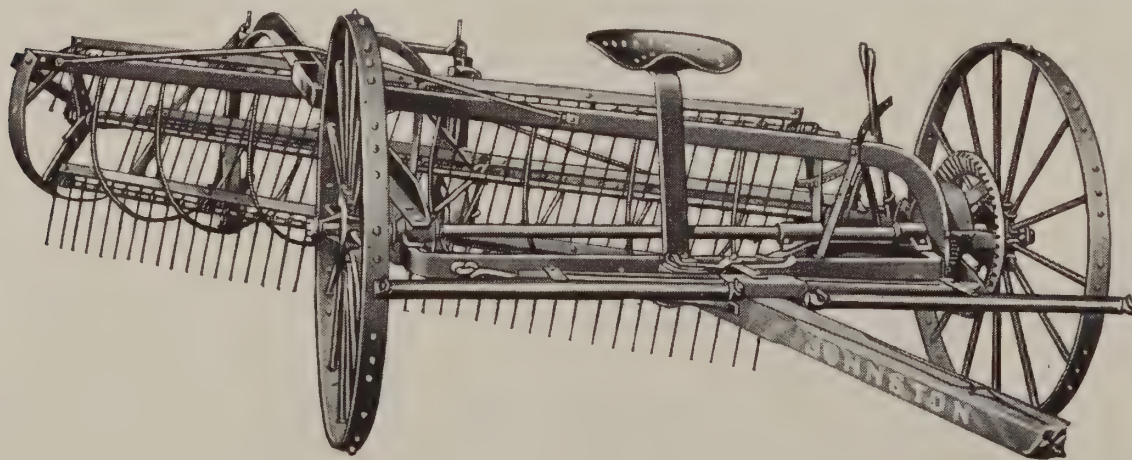
The same lever reversed throws the cylinder in gear for tedding



View of the two castor wheels. Center castor easily and quickly removed for tedding



The simple gear which drives the cylinder



Front view of the Combined Rake and Tedder





Johnston Hay Loader

NOTHING need be said about your need of a hay loader to lessen your labor and handle your hay faster and more economically, but much can be said about your need of a Johnston Loader. It is very simple and easily operated—just hitch it to the wagon and drive ahead. It is intended to load from the windrow, and we have yet to learn where it has failed to load windrows of hay, alfalfa or beans regardless of their size or heft of crop.

The frame is made of seasoned hard wood, held together by steel brackets. This makes a light yet very strong frame meeting every requirement. The wheels are high, having wide tires and substantial malleable hubs. Both are drivers.

The gathering drum consists of sixty malleable teeth arranged on six roller bars. These are so controlled that the teeth enter the hay in the same manner as the tines of a pitchfork, holding it securely until it is taken up by the carrier.

Each roller has steel springs at both ends to relieve the jar when an obstruction is encountered, and also to allow for an unusually large volume of hay.

The elevating carrier consists of two steel chains to which the carrying slats are bolted and a number of ropes which pass through the slats. The steady and positive motion of this simply constructed carrier insures the carrying of the hay upward evenly and continuously. It is delivered well on to the load, so it can be easily placed as desired.

There is absolutely no beating or threshing of the hay because it is at all stages handled as gently as when loaded by hand. An effective windbreak prevents the hay being blown off while passing up the load. A crank on each side is easily operated and regulates the tension of the carrier.

The fore-carriage is substantially built and with it the loader is much more convenient to handle. The fore-carriage takes all the forward weight of the loader, so that it can be easily attached; the loader follows the wagon better and can be more easily moved about. The axle on the fore-carriage is so pivoted that either wheel may pass over uneven ground without straining the machine or hindering its operation.



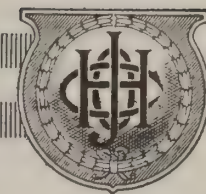


Johnston Hay Loader



The perfect windrow Loader. Will load any size windrow and handles the hay gently.
Exceptionally light of draft and easily attached to the wagon.
A Loader that merits your investigation





Johnston Spring Tooth Harrow

NO implement will ever take the place of a spring tooth harrow. They are necessary on every farm, large or small, and the more they are used to prepare the soil the better will be your crops.

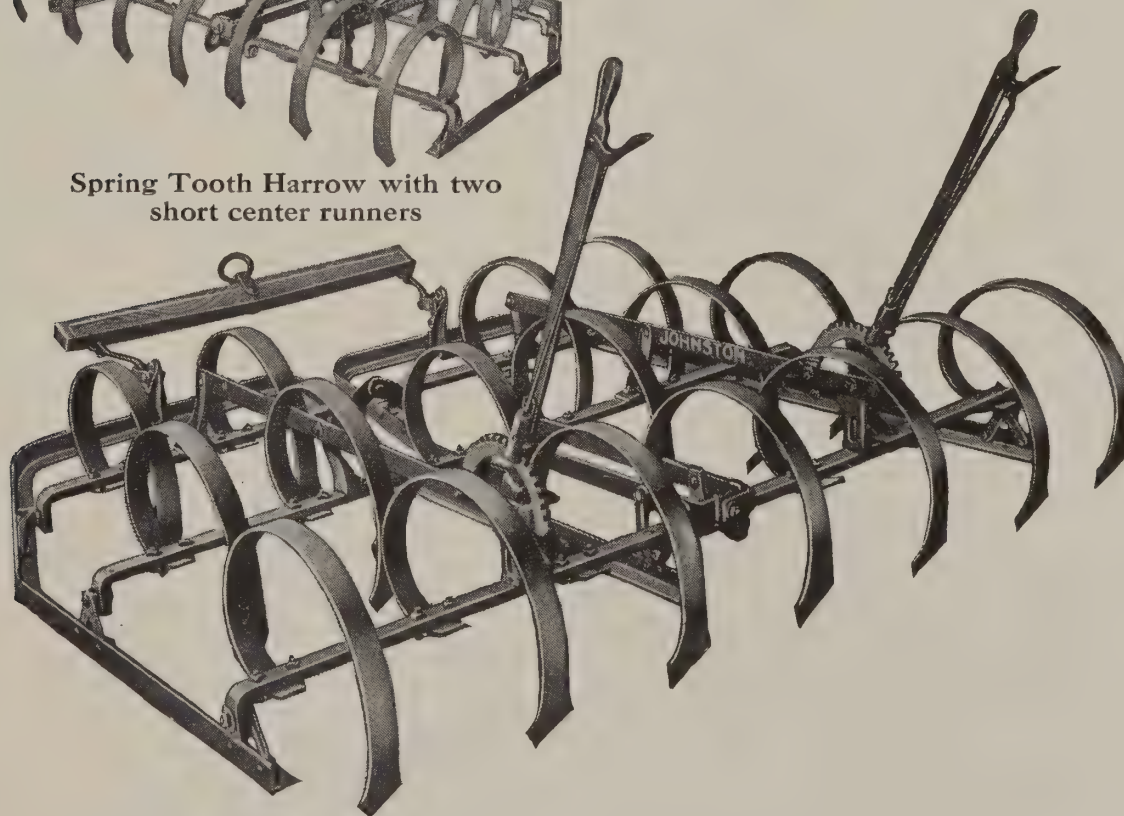
The Johnston Spring Tooth Harrow is of steel and malleable construction. The frame is of steel and to it are attached steel runner plates bolted on the under side to take the wear. They are easily replaced when worn.

The teeth are of the best oil-tempered spring steel. No two teeth trail. Convenient levers permit easy adjustment.

The Spring Tooth Harrow is made in two sizes—15- and 17-tooth. However, we also furnish an eight-tooth center section which can easily be used in connection with either of these sizes. By using the eight-tooth section you have a 23- or 25-tooth harrow.



Spring Tooth Harrow with two short center runners



Johnston Spring Tooth Harrows are built to give years of hard service.
View shows long center runner





Johnston Spike Tooth Harrow

THE Spike Tooth Harrow is of equal importance to the Spring Tooth. We know that you will find the Johnston Spike Tooth Harrows as strong and durable as any manufactured.

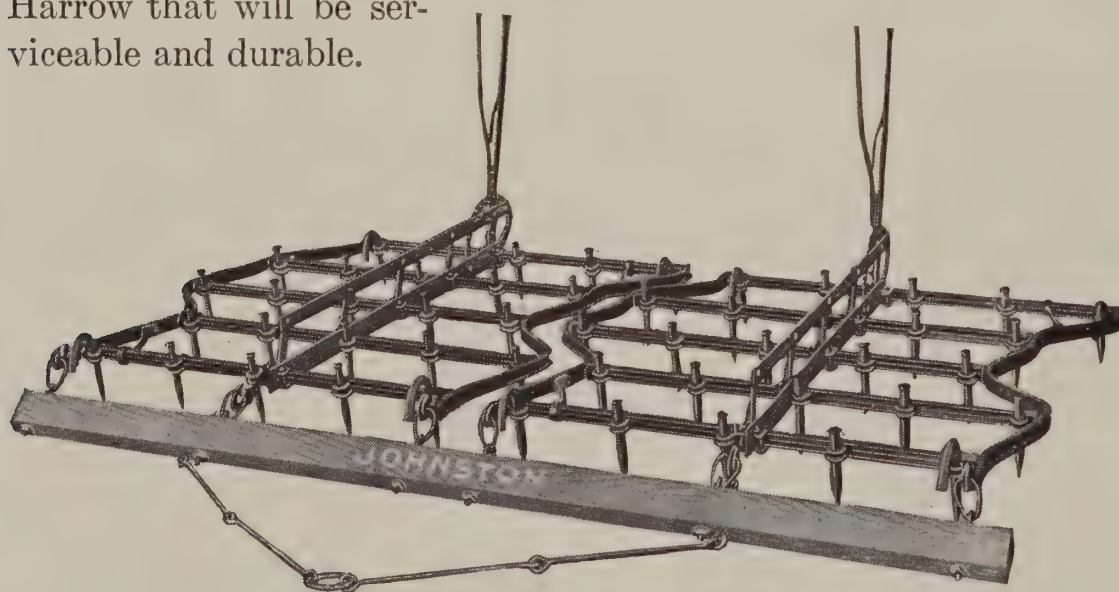
Our Spike Tooth Harrow is known as the "U" Bar Spike Tooth Harrow with closed end. These end bars are securely braced. The teeth are diamond shape or square as ordered, forged and tempered. They are upset on the ends to prevent slipping through the holders. They are attached to the bars with a forged steel clamp.

The position of the teeth is controlled by levers and can easily be changed to any angle, forward or backward. Thus the harrow can be instantly cleared of any trash or stubble without stopping the team.

Each section is fitted with four runner-teeth which enable the harrow to be easily transported to and from the field.

We make the Spike Tooth Harrows in six sizes—50 and 60 teeth for the two-section harrow; 75 and 90 teeth for the three-section harrow and 100 and 120 teeth for the four-section harrow.

So far as general principles are concerned Spike Harrows of all manufacturers are practically the same. The difference is in the materials used, the method of combining the different parts, attaching the teeth, etc. Our aim has been to manufacture a Spike Tooth Harrow that will be serviceable and durable.



The Johnston Spike Tooth Harrow will meet your every need





Johnston No. 25 Disc Harrow



This is a general purpose Harrow, built right in every particular. Can be had with or without the tongue truck and in many sizes





Johnston No. 25 Disc Harrow

(Old Continental. Out Throw Only)

PROPER preparation of the soil is commanding more attention every year. Thorough discing has proven one method of properly preparing the seed bed.

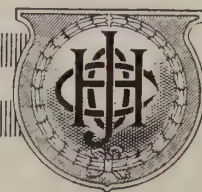
The Johnston No. 25 or Out Throw Disc Harrow is one that has been made to perform this function in the most satisfactory manner. It is not only made strong and durable—the first essentials to any implement—but it is easy to handle and draft is exceptionally light.

Tubular steel cross-bar and steel frames are used. Small thimbles prevent bar bolts from cutting out. The discs are of the very best steel. The standards consist of five sections, any one of which can be removed without taking the gangs apart.

End pressure is taken care of by convex center bumpers for each gang. They roll against each other, revolving in the direction in which the soil is turned. No other method will relieve the end pressure effectively. The Johnston has wood block bearings for the draft standards. They take all the pressure from the standard thimbles and reduce the draft to a minimum. The block is adjustable to take up the wear and the bearing is dust-proof. Rose steel blade scrapers, operated by automatic foot levers in front, and pressed steel weight boxes are used. Each gang has a shifter lever to control cutting angle.

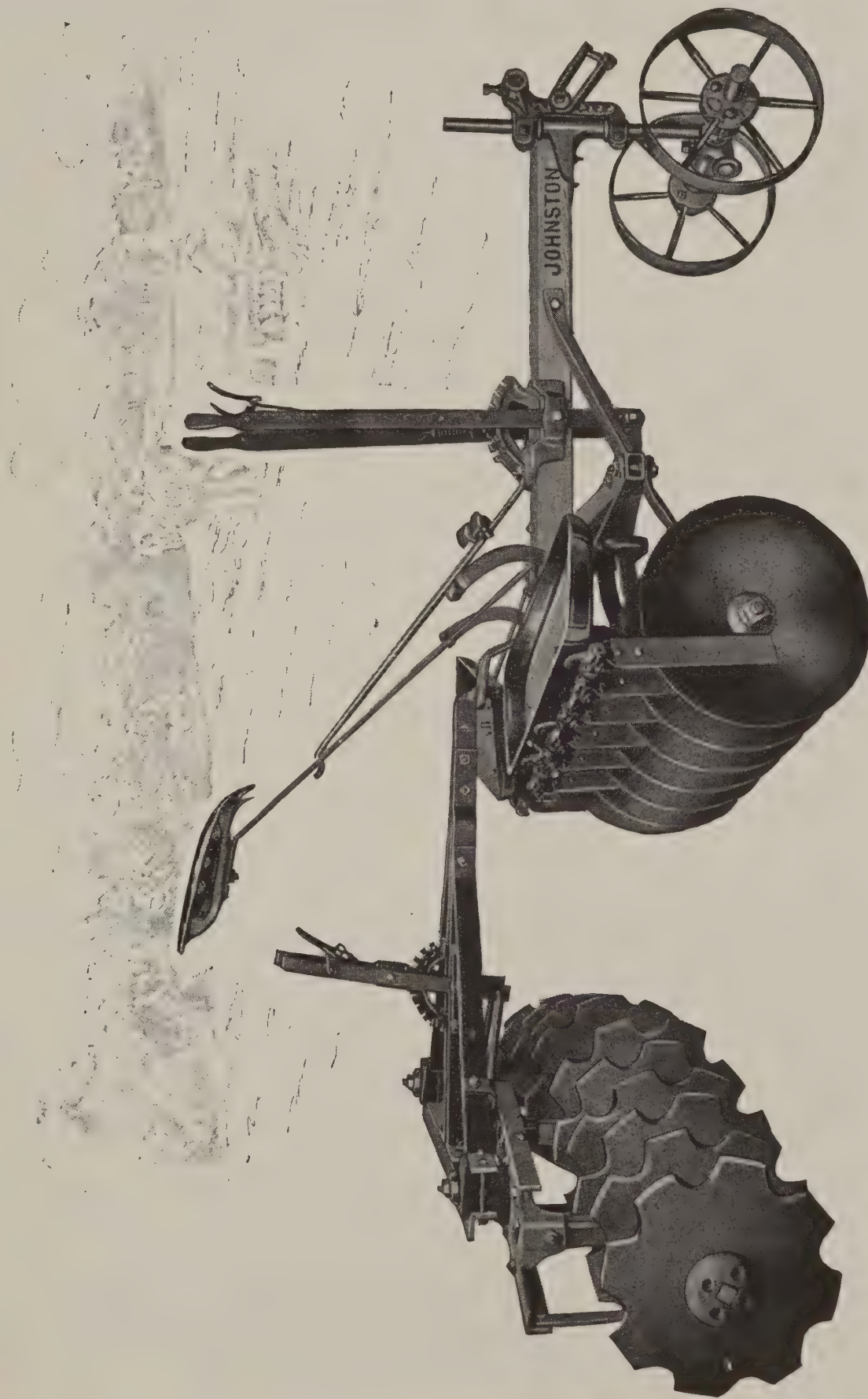
When ordered, our No. 25 Harrow is equipped with a Tongue Truck. This is very strongly built, and its use takes considerable neck weight off your horses. The 16-inch steel wheels are light, yet strong, and run on a steel axle. A spring oiler inside each wheel affords ample lubrication.

The Tongue Truck Standard extends upward through a casting which is securely bolted to the stub pole. The truck is easily adjusted on this standard by means of two set screws. Draft is always in direct line of stub pole. The draft yoke is made with a series of holes so that clevis can be raised or lowered as desired. Our combination straight or offset pole is a feature on the Tongue Trucks furnished with all Johnston Disc Harrows. It is easily and quickly adjusted so that two or four horses can be used.





Johnston No. 25 Double Disc Harrow



The value of this implement lies, mainly, in the combination of two harrows. The result is a thorough preparation of the soil in one operation





Johnston No. 25 Double Disc Harrow

THIS Double Disc Harrow will do as much work for you in one operation as any two single section harrows will do in two. It is fitted with solid discs in front and cut-out discs in the rear. The forward section throws the soil outward, cutting it up and performing exactly the same operation as any ordinary disc harrow. The feature is in combining this Harrow with the second section of cut-out discs. These do not trail in the furrows but between the furrows made by the discs on the forward section.

The action of the cut-out discs on the soil, immediately after being harrowed by the solid discs, thoroughly pulverizes it and leaves it free from clods, soft and in perfect condition for seeding. Every inch of ground is harrowed. To put the ground in the same condition it would be necessary for you to go over your field, first with the Disc Harrow and then follow with a spring or spike tooth. By using the Double Disc Harrow you have better prepared your seed-bed in just half the time and half the cost of labor.

The Johnston Harrow is what is called a flexible harrow. By that we mean that it is impossible to make the rear section conflict with the forward section. Short corners can be turned without any trouble and without any strain on the other section. This flexibility is accomplished by our simple method of attaching the one to the other. It can be detached by simply removing a cotter pin. It requires no skill to operate. Levers are within convenient reach of the driver. It is light of draft. The detail of the construction of this Double Disc Harrow you will find in the description of our No. 25 Harrow. They are identical in construction except that the rear section is fitted with the frame which connects it with the forward section. Tongue truck is the same as furnished with other Harrows.

The fact that the rear section is so easily removed, leaving a regular disc harrow, makes it adapted to those farmers who have uses for the single section for some kinds of work.

If you already have a Johnston No. 25 Out-throw Disc Harrow (Old Continental) the attachment with all connections can be purchased and easily attached.





Johnston No. 26 Disc Harrow

(Old Orchard. Reversible and Adjustable)

HERE is a machine you can use in the orchard, orange grove, vineyard, cotton field, or for general discing.

Its reversible feature practically gives you two implements in one. The gangs are interchangeable in their position on the frame. This enables you to throw the soil to or from the roots, as you may desire.

It is also adjustable. You can cut to any depth, in the middle or at the ends, by means of gang hinges. The gangs are easily adjusted, separately, to any angle, thus regulating the amount of dirt thrown.

This Harrow is adapted to this kind of work much better than a plow. The Johnston cultivates all the ground and gets the soil just where you want it. It works equally as well on the side hill as on the level.

The discs are made of steel. They will not turn because they are held fast by a square arbor bolt.

The steel frame is in one piece. Strong arches or yokes support the gangs. Separate bearing-boxes take up the friction. We furnish, as an extra attachment, a steel extension frame. With this extension the operator is able to cultivate under the trees, close to the trunks, and the horses do not interfere with the branches. This extension will save many times its price.



An ideal Harrow for orchard or vineyard cultivation. Simple in construction and strong

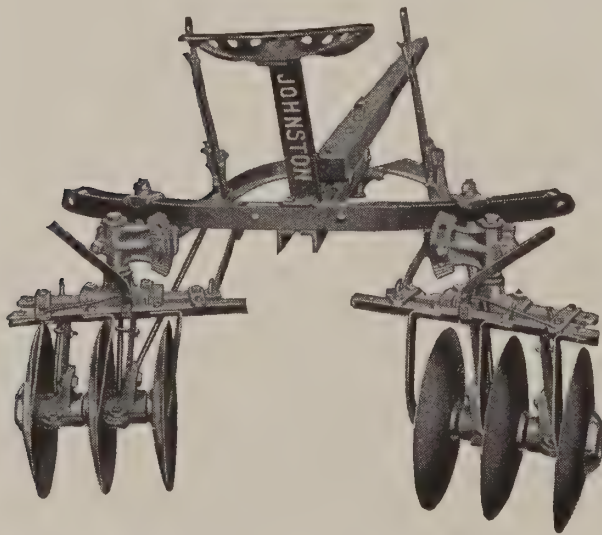




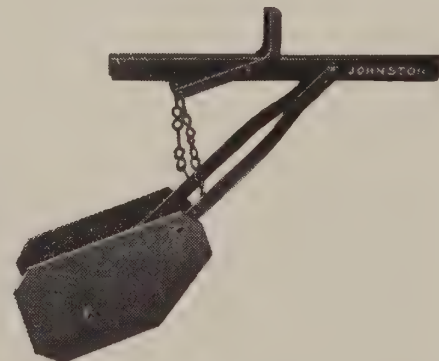
Johnston No. 27 Disc Harrow



A practical combination Harrow. Can be used as a harrow or cultivator. Gangs are reversible and adjustable. Strongly built and light of draft

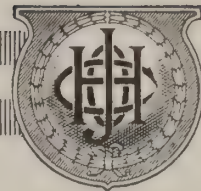


Showing the gangs set to throw the soil inward



The fenders which can be easily and quickly attached when cultivating crops





Johnston No. 27 Disc Harrow

Reversible and Adjustable Gangs

THIS Disc Harrow has been built to fill a long-felt farmer's need. Briefly it is an in- or out-throw harrow or a disc cultivator all in one implement. But its value to a great extent lies in the ease with which it can be changed from one to the other or adjusted.

The frame is entirely of angle steel construction. A majority of the other parts are steel and malleable, so that strength is not sacrificed for lightness. The gangs are attached to a steel support at the rear of the frame. The steel gang standard passes through an adjustable bracket, securely bolted to a sliding bracket which is fastened to the angle frame. This method holds the gangs rigid, but permits an easy adjustment when it is desired to spread the gangs far apart or use them close together.

The steel discs are the same as used on our other Disc Harrows. Each gang is fitted with convex center bumpers. Steel oil tubes make oiling easy and convenient. Draft rods are attached in the center of each axle, insuring straight and even draft.

The Harrow is perfectly balanced, as the seat extends to the rear of the discs and the driver's weight is used to the best advantage. The No. 27 is light of draft, and even with the straight pole there is little neck weight on your horses.

This Harrow is equipped with our regular Tongue Truck with combination straight and offset pole, when so ordered. Tongue Truck has been described with the description of our No. 25 Harrow. A high frame attachment is furnished, which enables you to raise the frame to a sufficient height to clear growing crops. Fenders can also be attached for use with the harrow set to throw the soil inward when cultivating small plants. They effectively push the soft, mellow soil close to the roots.

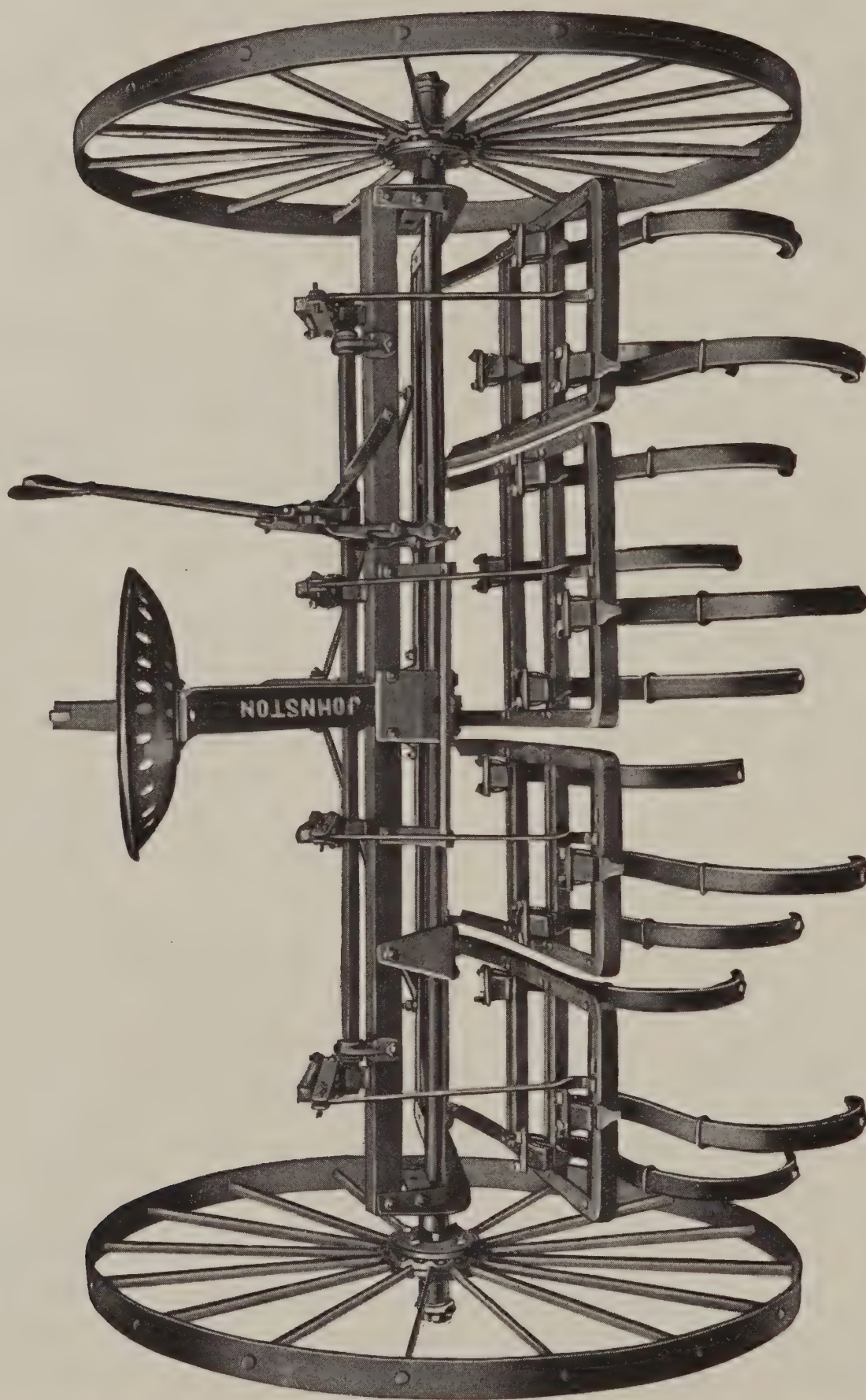
This Harrow is so easily reversed from an in-throw to an out-throw, or vice versa, and changed from a harrow to a disc cultivator that its value cannot help but be quickly recognized by all farmers.

The No. 27 Harrow is made in several sizes, with either solid or cut-out discs.

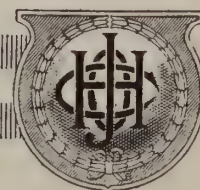




Johnston No. 7 Cultivator

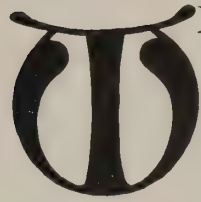


This field Cultivator gets right down to business. Will cultivate the hardest soil and rid your fields of the most obstinate weeds





Johnston No. 7 Cultivator



WHEN the name Cultivator is applied to an implement it is generally understood that an implement to cultivate crops is meant. Such is not the case with this No. 7, however, as we believe the term applies just as truly to cultivating the soil as to crops. Hence the No. 7 Cultivator is a riding field cultivator and it will effectively clean out the most obstinate weed pests and form a mulch of loose soil. Farms have been cleared of thistle, quack grass, etc., after having been given up in despair by their owners, by the systematic use of these Cultivators.

The effectiveness of this implement is due to the method of applying the spring pressure to the teeth. This always remains the same even when passing over uneven ground. The frame and sections are made of high carbon angle steel, giving ample strength to withstand the severe strain. Each section is built of a single piece of angle steel with angle steel crossbars securely riveted in place.

A steel axle extends the entire width of the Cultivator and adds strength to the frame. The steel wheels are high and strong and broad-faced, which insure easy and sure traction. Wheels are fitted with long axle bearings, so that they have no tendency to wobble or spread.

The angle or pitch of the teeth is easily and quickly adjusted by means of the adjustable connection to the crossbars. They may also be moved sideways and set at any point on the crossbars. The teeth are tempered spring steel. Each one is reinforced by a spring steel helper, which increases the flexibility and prevents breakage when striking a stone or root. The regular points are reversible, giving double wear.

A single lever, conveniently located, controls the movement of the sections and gives the required pressure on the teeth. This lever has a reverse motion so that the teeth can easily be raised or lowered as desired.

An adjustable clevis with four adjustments permits you to hitch your team so as to overcome neck weight. A two- or three-horse doubletree is supplied.





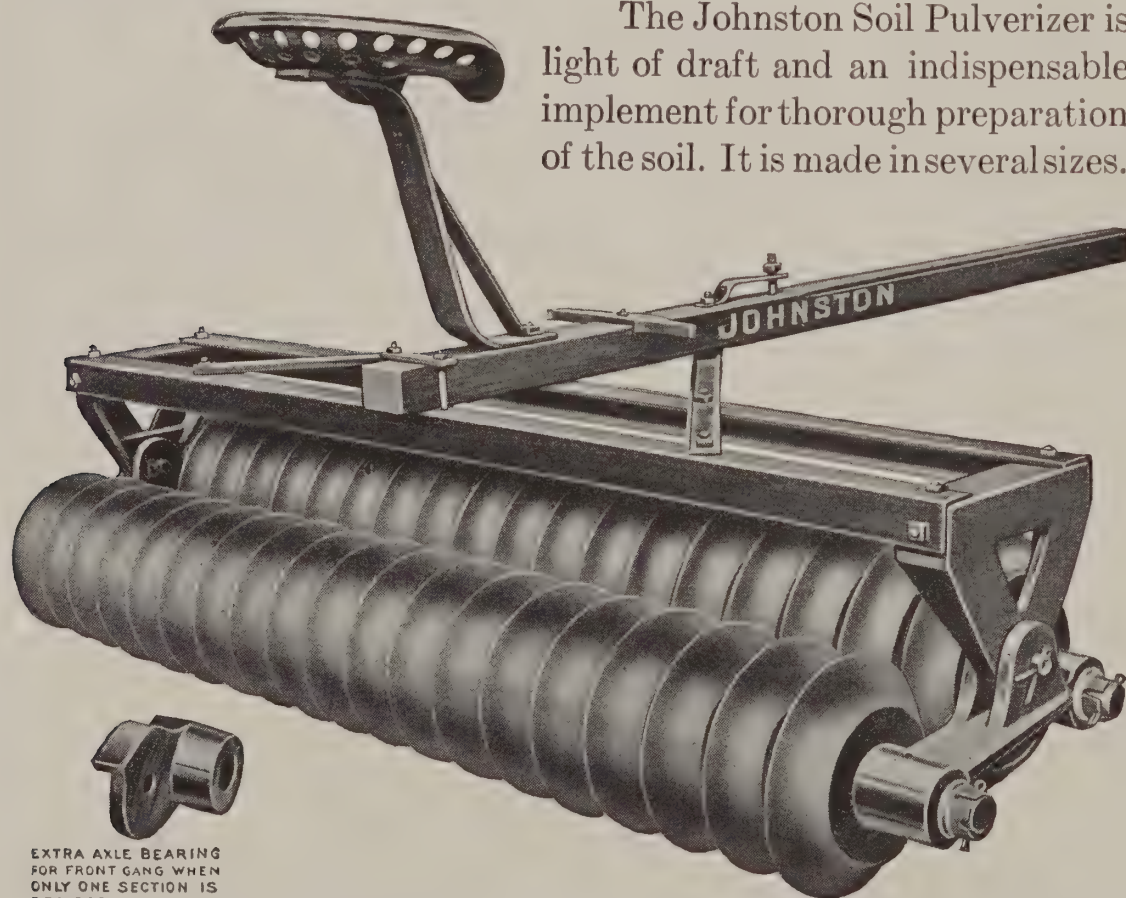
Johnston Soil Pulverizer

IT seems hardly necessary to explain to you the value of this implement. Briefly, careful preparation of the soil means larger crops, so if one implement will roll, crush the clods and pulverize the soil in one operation, its value is apparent. Such is the Johnston Soil Pulverizer.

The frame is made of heavy angle steel. It will not sag and is strong enough to carry weights if necessary. A 1 $\frac{3}{4}$ -inch machine steel axle extends the full length of the implement. Each section is a solid casting, strong and hard to nick.

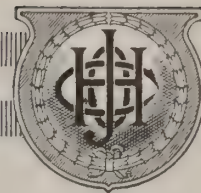
The implement is made in two styles, with a single gang or with two gangs. The Pulverizer with two gangs is so constructed that the rear gang, or trailer, is easily and quickly detached if it is desired to use only one gang. When attached the discs on the rear gang do not trail those on the forward gang. Thus every inch of ground is pulverized.

The Johnston Soil Pulverizer is light of draft and an indispensable implement for thorough preparation of the soil. It is made in several sizes.



A single or two section implement which effectively crushes the clods and rolls the soil in the same operation





Johnston Steel Land Roller

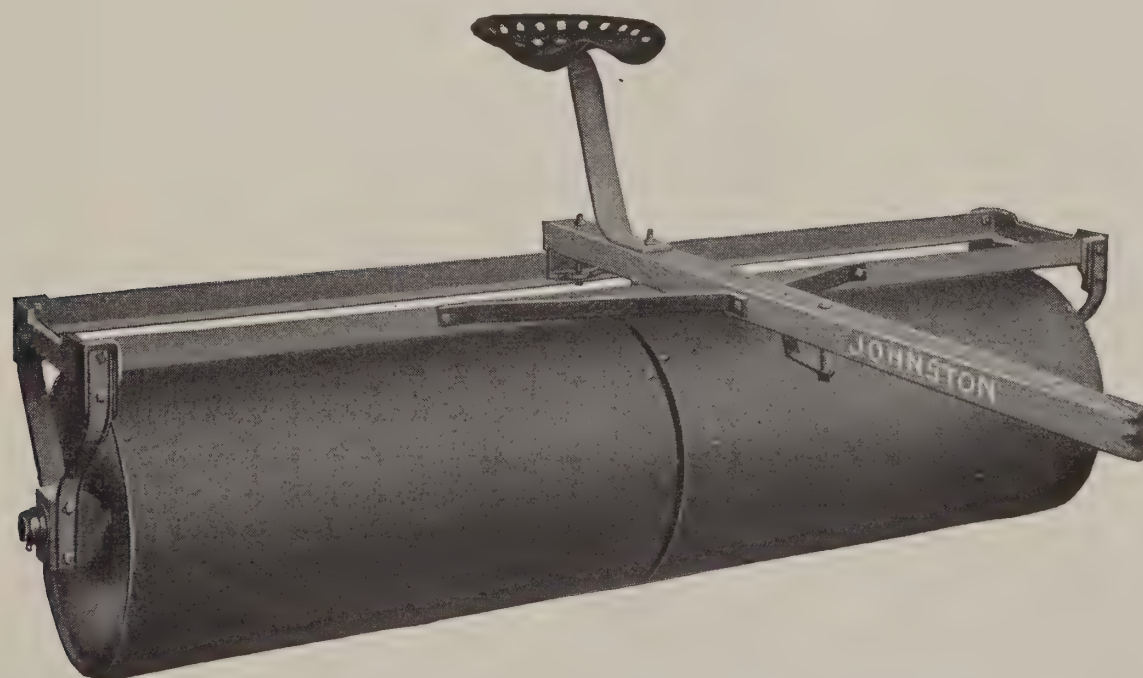
THERE is a strong, solid, substantial Roller, furnished in several sizes of either two or three sections, that will give you long and satisfactory service.

The frame is angle steel and to it are attached the one-piece, channel steel end standards which support the bearings and axle. We use a $1\frac{7}{8}$ -inch steel shafting axle which extends the whole length of the roller, and supports the hard maple boxes at either end. These boxes are easily detached and cheaply replaced when worn. It has been demonstrated that wood bearings wear longer and work easier than metal bearings.

To prevent wear on the axle a cast sleeve or collar is placed on the hubs at each end of the drums. The drums are made of high carbon steel and the ends are closed so that no dirt or trash can get in. These solid sheet steel heads are held in place with bolts. Each drum turns independently on the axle.

We make a two-section Roller with a center draft attachment which is a distinct advantage on a wide roller. This attachment is bolted to the frame and helps to keep the frame rigid. This also has the removable wood bearing, easily and cheaply replaced when worn.

The Johnston pole is set on top of the frame so that there is no danger of clogging when rolling wet land.

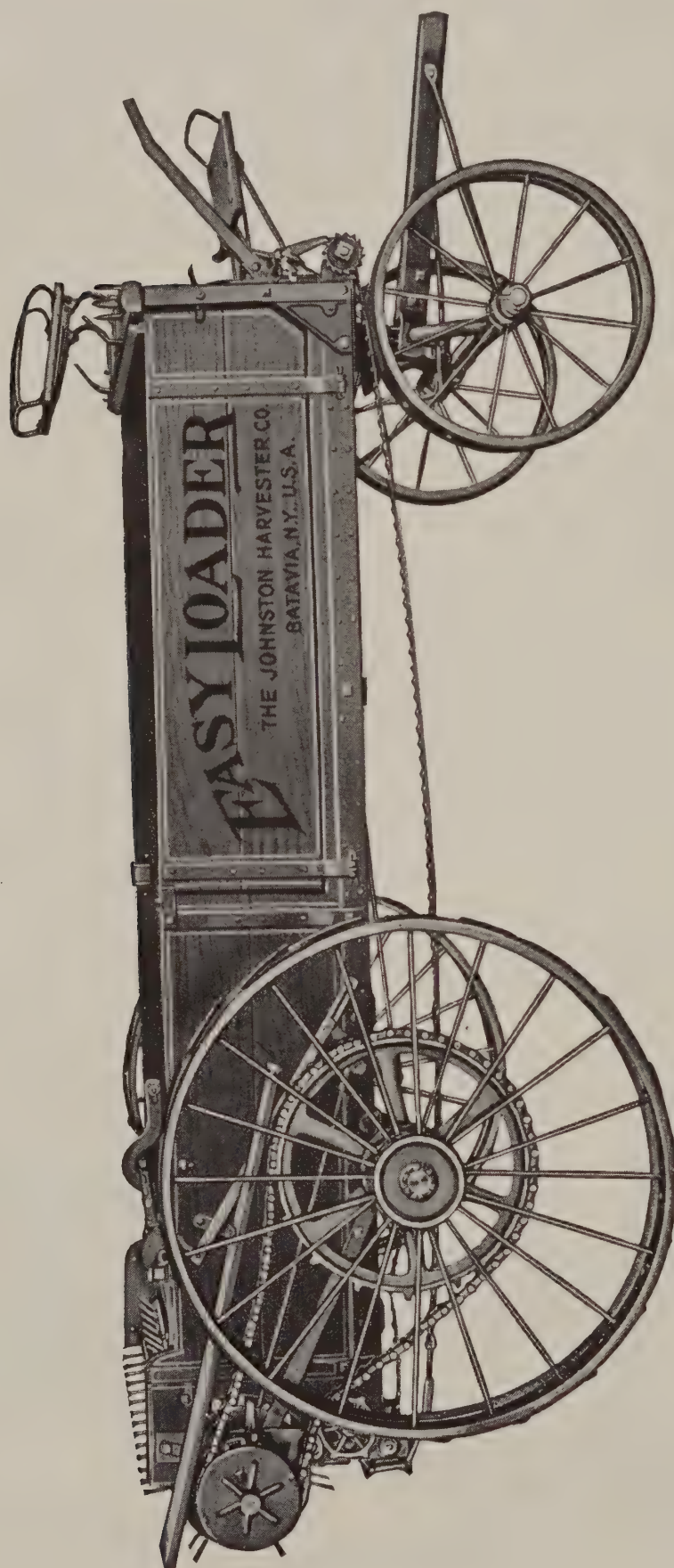


The Johnston Steel Roller is a perfect implement. Built to give years of service



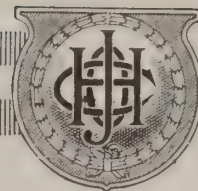


Johnston "Easy Loader" Spreader



No Spreader will handle your valuable barnyard manure better than the "Easy Loader." Simple in construction,
easy to load, light of draft





Johnston "Easy Loader" Spreader

THE old pitchfork method of spreading manure is fast being superseded by the manure spreader. Farmers are realizing that there is money in the barnyard manure which they have either wasted by not using at all or by careless distribution. Manure spreaders have solved the problem of saving this valuable fertilizer as well as the most economical way to distribute it.

The "Easy Loader" is no experiment. It has been on the market for many years and the friends it has made among farmers everywhere are ample proof of its practicability. It has features which make it distinctive and superior to any other spreader. It is built of the best materials throughout and every "Easy Loader" is set up and run at the factory before packed for shipment. You are therefore sure of getting a Spreader every part of which fits perfectly and will run smoothly when in actual operation.

Just at present there is a great craze for "low-down" spreaders. There is as much danger in getting a spreader too low as there is inconvenience in having it too high. The "Easy Loader" is the happy medium. It is built high enough to clear ordinary field obstructions, and to permit the forward wheels, which set under the spreader, to turn without difficulty. It is low enough to permit easy loading. The Johnston is the only Spreader with the drop side feature which makes it as easy to load as the lowest low-down spreader. The floor at the front is only thirty-four inches from the ground and thirty inches in the rear. Also, the tail-board is always down except when spreading, and loading is therefore easy from the rear. It is only forty-eight inches from the ground at this point.

The side sills of the main frame are channel steel and will not sag or twist. The "Easy Loader" was the first to be built with these channel steel side sills and we have never heard of this construction giving the least trouble of any nature. Cross sills are of 3 x 5 oak. The frame is further strengthened by a T-steel bar which also forms a track for the center chain which operates the return of the apron when the load is spread.





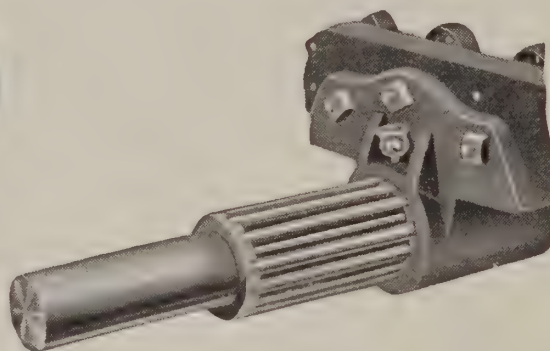
Johnston "Easy Loader" Spreader



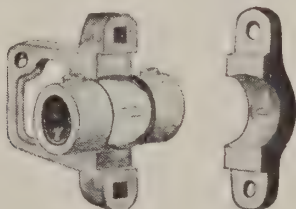
The strong main frame, showing steel side sills and oak cross sills



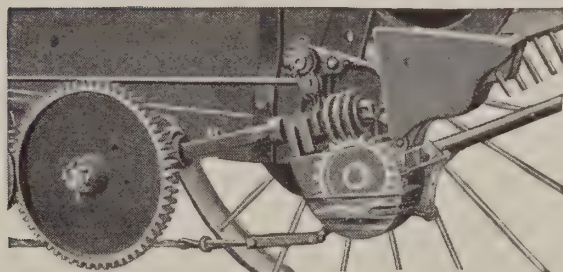
The simple worm gear that positively prevents racing of the apron



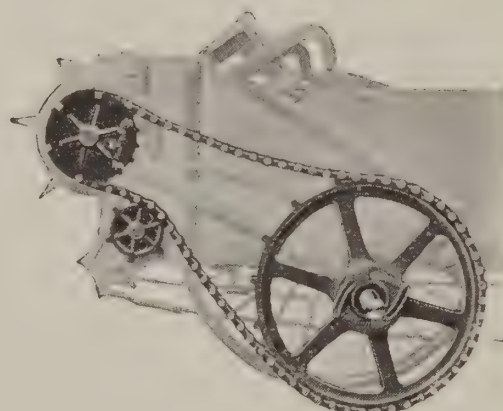
The roller bearing on rear axle



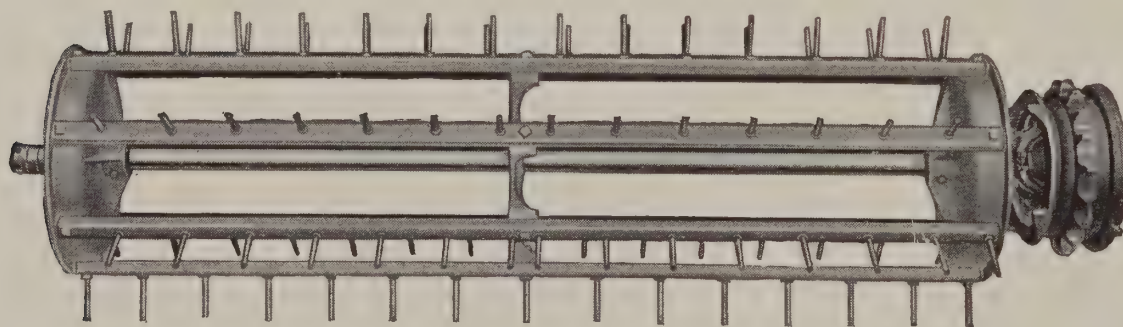
The self-aligning box



View of the oil case which encloses the worm gear



The simplex chain drive. Beater is driven directly from main axle



The steel beater. No wood parts to warp or crack





Johnston "Easy Loader" Spreader

THE Johnston Spreader has two floor chains, one on each side of the apron. This method insures an even and easy motion toward the beater. The floor is composed of narrow lags or slats. Each lag is riveted to a malleable link. These are so fitted as to form a tight, yet flexible bottom. The lags are detachable, no rivets to cut, no tools necessary.

By means of an automatic floor the feed stops and the apron is returned to its original position as soon as the load is completely spread and the head-board is next the beater. Every last particle of manure is spread with the Johnston, and the last of the load is spread just as evenly as the first part. This is a feature not true to many spreaders and is accomplished by having the head-board follow the load and the driving mechanism of the beater on one side and that which drives the apron on the other. Strain is therefore evenly divided.

A lever within convenient reach regulates the amount of manure to be distributed. The worm feed on the Johnston positively prevents overhauling and racing of the bottom, regardless of the lay of the land. Our worm gear runs in an oil bath as does the simplex beater mechanism. Our beater is of steel which is much superior to the old style wooden beater. The beater is driven by a chain running over the beater shaft and a large sprocket on the main axle. This method is direct and positive.

The Spreader is easily thrown in gear by a convenient lever and the tail-board is automatically raised at the same time. It drops back into place as the machine is thrown out of gear.

High, broad-faced steel wheels are used in the rear, and smaller ones, also of steel, in front. As the rear axle turns with the wheels, roller bearings are incased in heavy roller boxes which are attached to the sills.

The Johnston "Easy Loader" is made in four sizes and equipped with either a single pole, two- or three-horse hitch, or the double pole combination two- or three-horse hitch.





Johnston Repairs

WE do not claim that Johnston Machines never need repairs, but by exercising a little care in adjustment and usage you can reduce the expense for repairs to the minimum. We maintain large stocks of repairs for our machines at all our Branch Offices and other transfer points, as well as at thousands of our local agencies. It is, therefore, seldom necessary to send to Batavia for repairs, unless you are located nearer our factory than to any other stock of repairs. Thus, quicker and cheaper delivery can be made.

We also wish to emphasize the necessity of using only Johnston Repairs, secured only through ourselves or representatives, on Johnston Machines. Our repair parts are made to fit our own machines perfectly, and if repairs are purchased elsewhere there is a strong possibility that they will not fit as they should, and consequently the machine will not do perfect and satisfactory work.



